Administration Report on the Railways in India for the Years 1902 & 1903

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR THE

Calendar years 1902 & 1903

BY

134499

A. BRERETON, Esq.,
SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT, RAILWAYS.

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Dated the 23rd May 1903.

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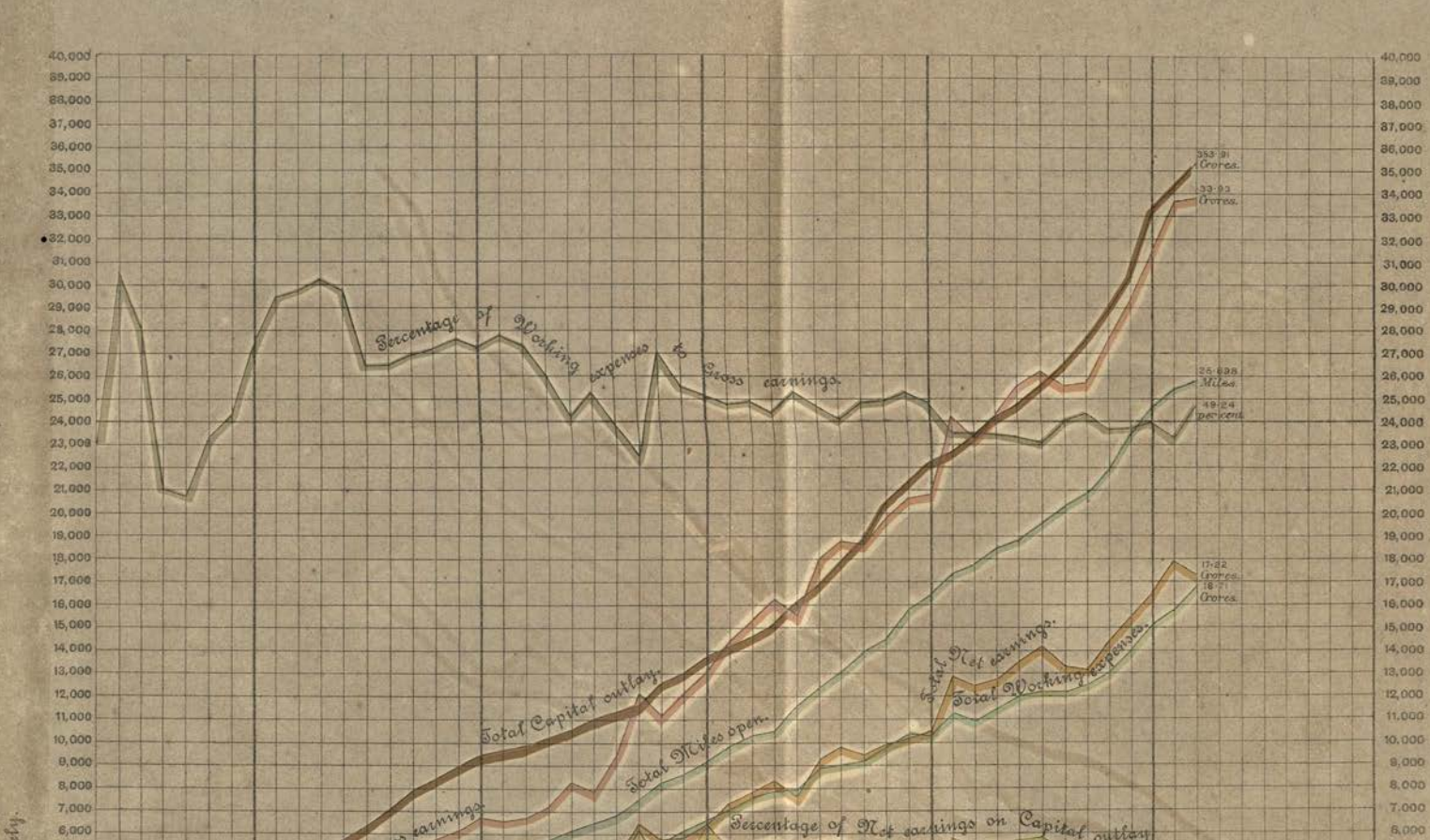
INDIAN RAILWAYS.

Diagram showing for each year the totals up to 31st December 1902 for Capital outlay, Gross earnings, Net earnings, Working expenses, and length in Miles open, also percentage of Net earnings on Capital outlay and percentage of Working expenses to Gross earnings.

The figures on this scale represent lakhs for the Capital outlay, tens of thousands for Gross earnings, Working expenses and Net earnings, and Miles for length open.

In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.

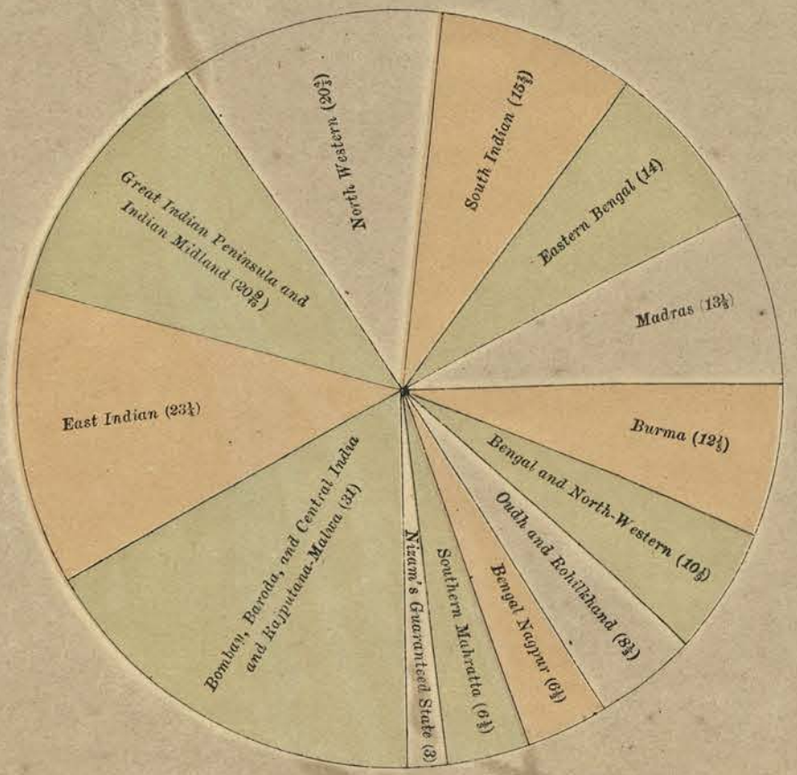

353·91 Crores.
33·93 Crores.
25·628 Miles.
19·24 per cent.
17·22 Crores.
16·7 Crores.
4·62 per cent.
Percentage of Working expenses to Gross earnings.
Total Capital outlay.
Total Gross earnings.
Total Miles open.
Total Net earnings.
Total Working expenses.
Percentage of Net earnings on Capital outlay.
YEARS
1853 4 5 6 7 8 9 1860 1 2 3 4 5 6 7 8 9 1870 1 2 3 4 5 6 7 8 9 1880 1 2 3 4 5 6 7 8 9 1890 1 2 3 4 5 6 7 8 9 1900 1 2 3 4 5 6 7 8 9 1910

No. 208, Works, India.—May 90.—1,700.

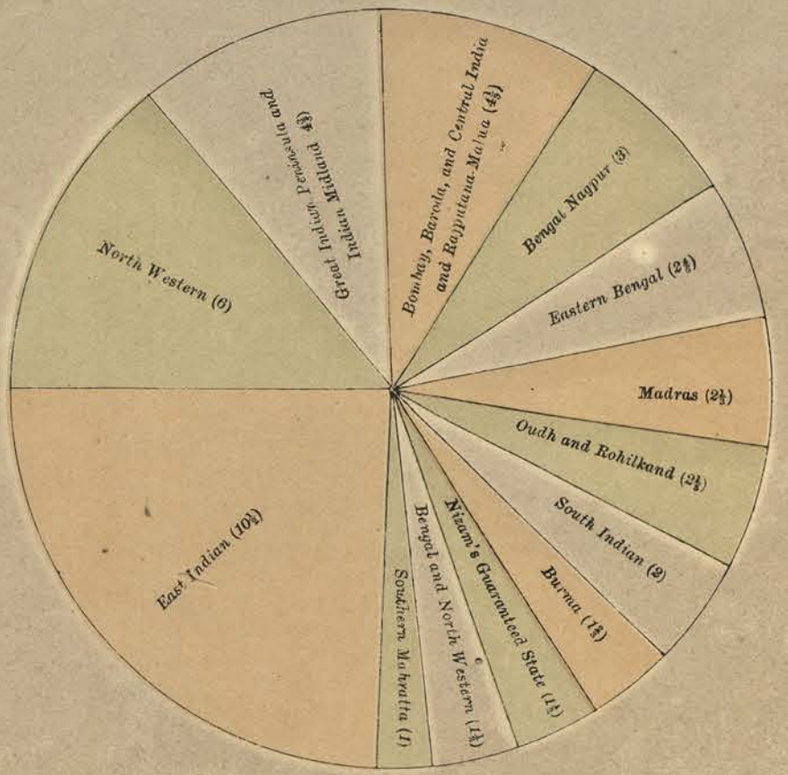
Litho. S. I. O., Calcutta.

Diagram showing the Number of Passengers and Quantity of Goods in tons conveyed by the principal railway systems in India during the calendar year 1902.

Number of Passengers (in millions).



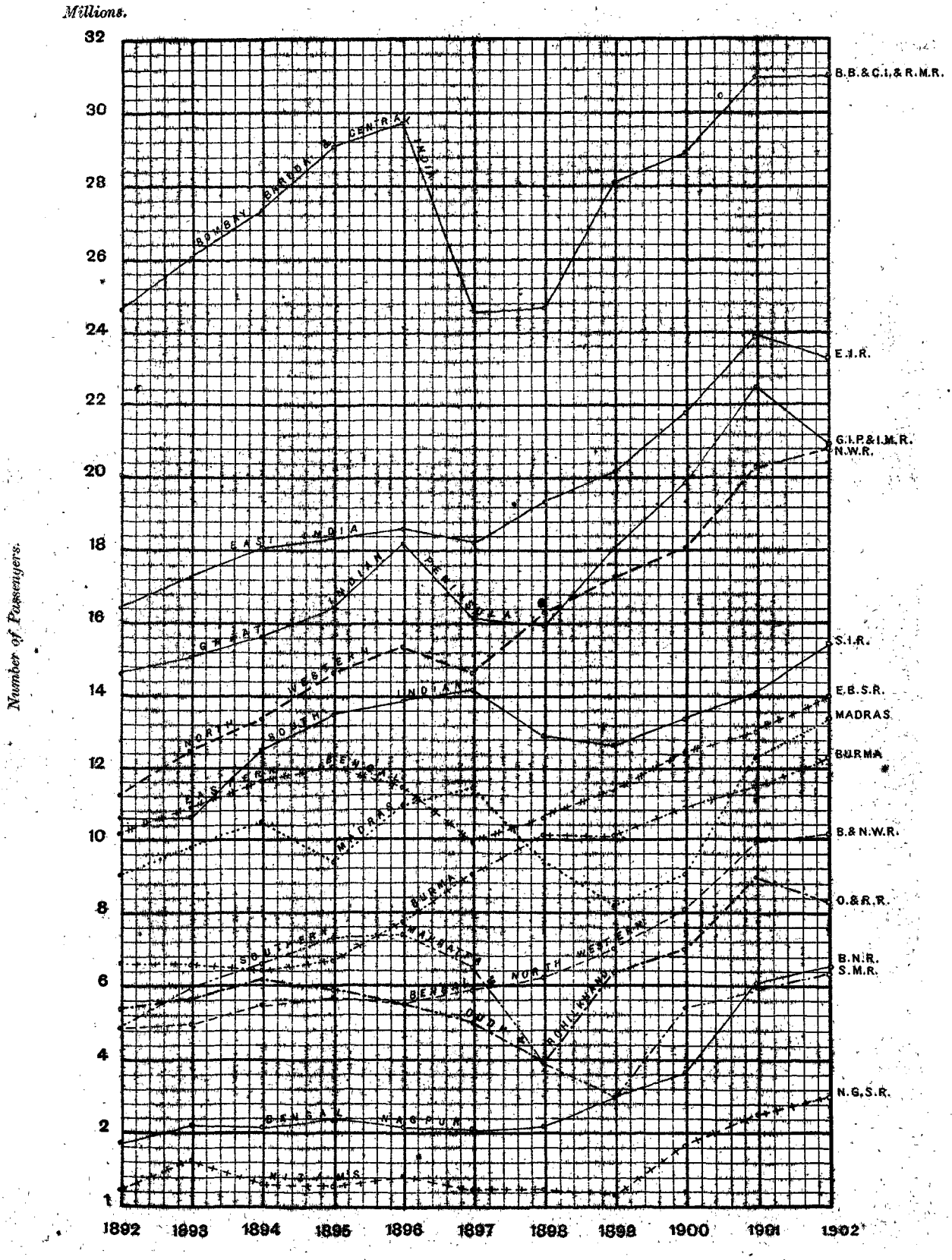
Quantity of Goods in tons (in millions).



No. 248, Works, India.—June 03.—1,650.

Litho., S. I. O., Calcutta.

NUMBER OF PASSENGERS CARRIED ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.



No. 243, Works, India.—June 03.—1,850.

Litho., S. T. O., Calcutta.

PASSENGER UNIT-MILEAGE
ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.

Millions.

Passenger Unit-Mileage.

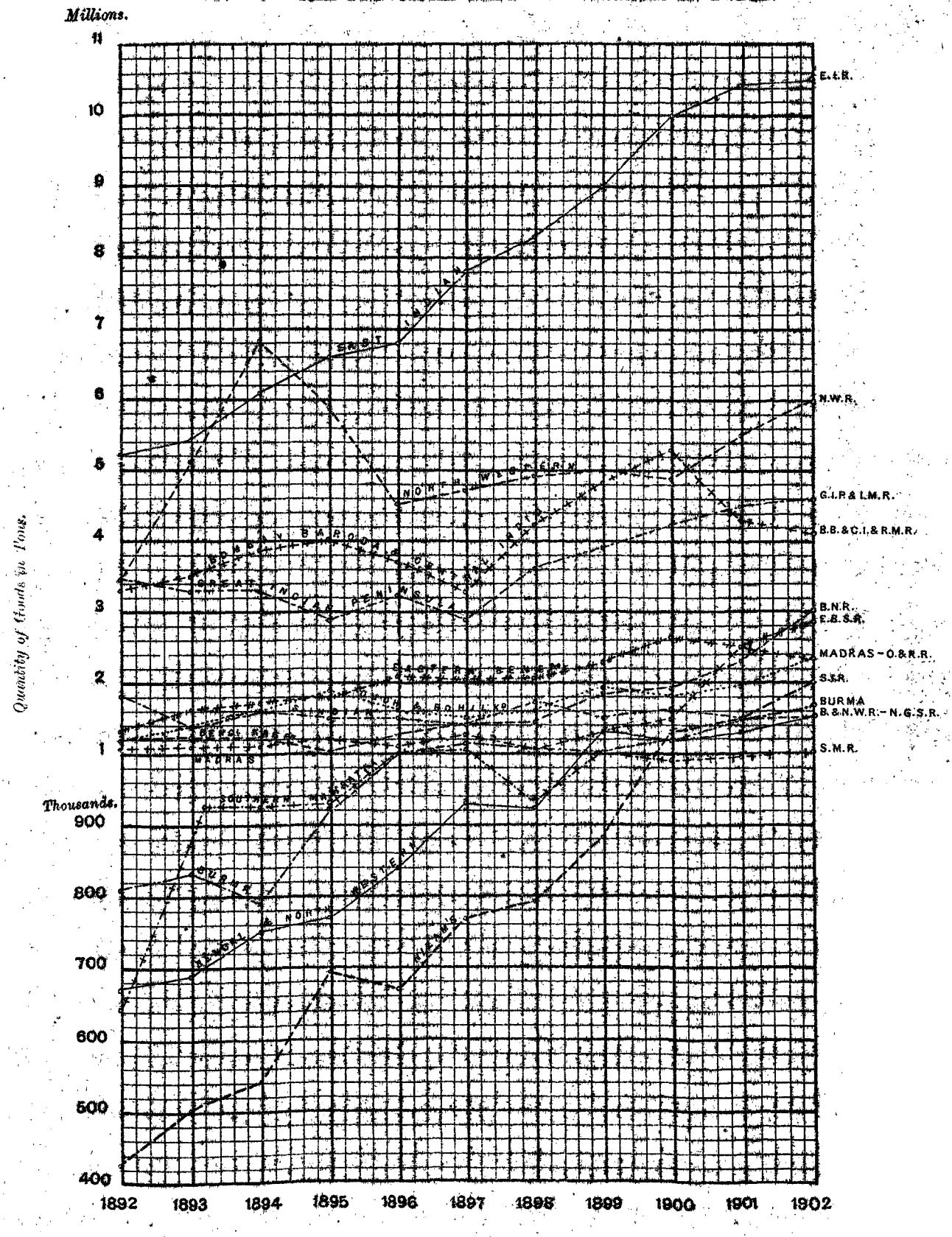
1,500
1,400
1,300
1,200
1,100
1,000
950
900
850
800
750
700
650
600
450
400
350
300
250
200
150
100
70
50

1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902

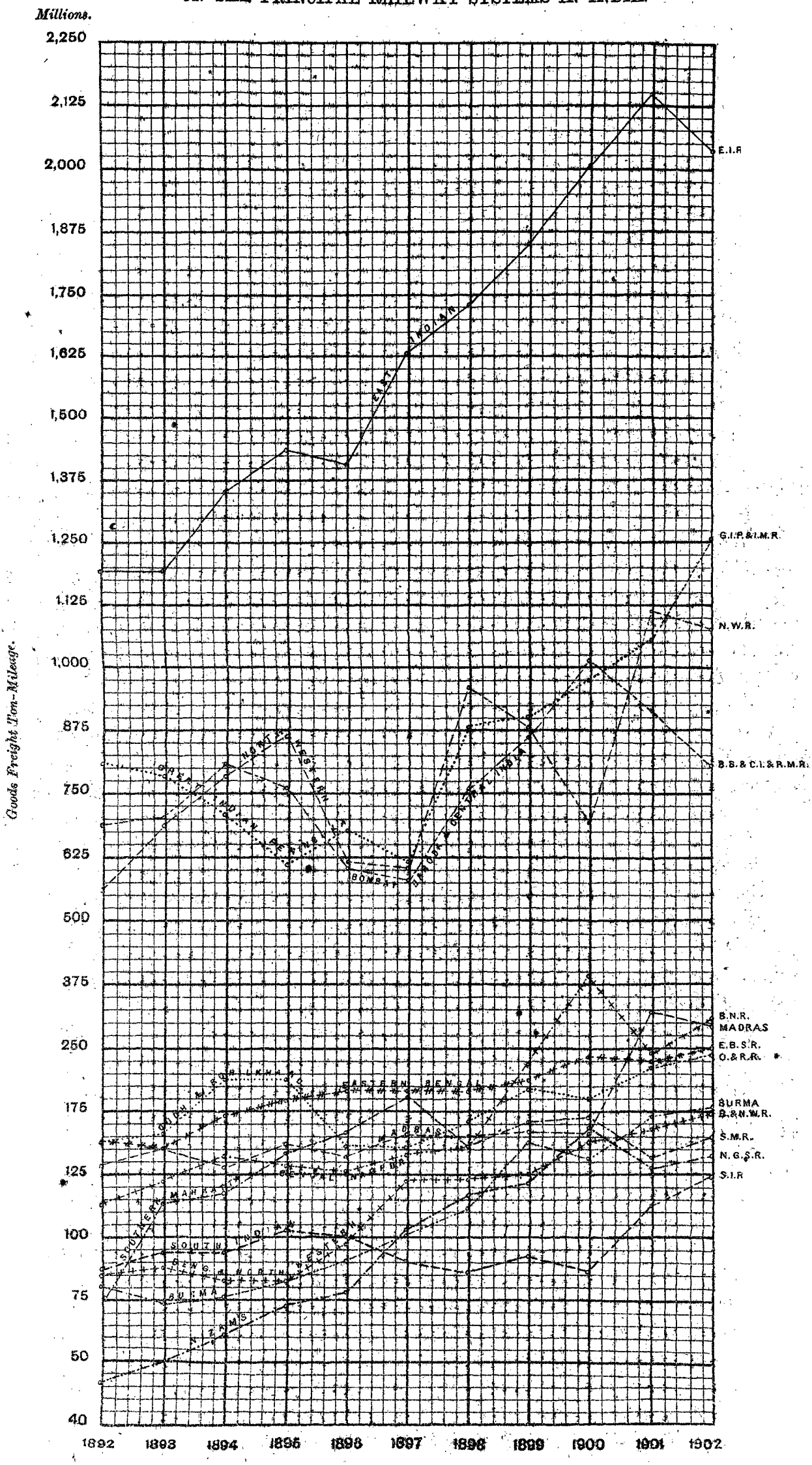
E.I.R.
N.W.R.
B.B.&C.I.&R.M.R.
G.I.P.&I.M.R.
S.I.R.
MADRAS
B.N.R.
E.B.S.R.
B.&N.W.R.
O.&R.R.
BURMA
S.M.R.
N.G.S.R.

EAST INDIAN
BOMBAY BARODA & CENTRAL INDIA
WESTERN
GREAT INDIAN PENINSULA
NORTH WESTERN
SOUTH INDIAN
MADRAS
BENGAL & NORTH WESTERN
BENGAL NAGPUR
MYSORE

QUANTITY OF GOODS IN TONS
CARRIED ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.



GOODS FREIGHT TON-MILEAGE
ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.



RAILWAY SYSTEM OF INDIA

Corrected up to 30th April 1903.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

BOMBAY.

CALCUTTA — Scale 1 inch = 2 miles

MADRAS.

CAWNPORE Jn.

CITY

CANTONMENT

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PART I.

GENERAL REPORT.

General.

The accounts of the year 1902 disclose a surplus to the State of nearly 2$6\frac{1}{2}$ lakhs of rupees. This figure is considerably below that obtained last year, principally, as will be seen from the figures in the next paragraph, on account of the large increase under working expenses, caused in the main by renewals of permanent-way and rolling-stock. This is the third year in succession in which railways have been profitable to the State.

Financial results to the State.

2. The surplus has been arrived at after charging against *Revenue*, the expenses incurred in actually working the open lines of railway including interest charges on their outlay, the interest on the capital expenditure on lines under construction, from which no revenue is obtained, and on the unexpended balances of the capital deposited by companies, and also the amount paid yearly, by means of sinking funds and annuities, for the redemption of the commuted capital of those railways which have been purchased by the State. Calculated on this basis the results for the last four calendar years are shown in the following table :

	1899.	1900.	1901.	1902.
REVENUE.	Rs.	Rs.	Rs.	Rs.
State railways.—Gross traffic earnings	20,68,82,768	24,61,24,915	27,82,42,003	28,08,52,109
Guaranteed Companies—Gross traffic earnings	6,33,60,199	4,79,09,158	2,74,25,599	2,75,84,610
Subsidized „ Repayment of advances of interest	4,23,202	3,23,046	4,61,226	7,63,462
Total Revenue	27,06,66,169	28,83,57,119	30,61,28,828	30,92,00,181
CHARGES AGAINST REVENUE.				
State railways.—Working expenses	10,13,16,951	11,87,97,703	13,41,56,175	14,17,27,993
„ „ Interest* on total capital outlay in India and on debentures discharged	4,22,63,678	4,39,11,915	4,49,54,370	4,72,80,834
„ „ Interest on debt incurred in, or created for, the purchase of railways	83,83,740	98,22,152	1,13,37,298	1,15,09,617
„ „ Annuities in purchase of railways—Interest	2,94,07,445	3,56,91,431	4,25,83,683	4,22,03,027
„ „ Annuities in purchase of railways—Redemption of capital	33,77,277	60,17,752	88,78,497	91,65,078
„ „ Interest chargeable against Companies on advances	56,48,174	59,72,073	60,95,434	54,29,993
„ „ Interest on capital deposited by Companies	1,28,12,593	1,40,08,809	1,59,35,322	1,74,68,054
Guaranteed Companies.—Working expenses	3,29,97,754	2,47,72,576	1,28,86,207	1,38,55,568
„ „ Surplus profits, etc.	43,44,239	30,16,780	18,11,890	12,93,644
„ „ Land and supervision	7,26,013	2,68,754	— *1,94,361*	—*95,692*
„ „ Interest	3,27,70,756	2,39,25,665	1,53,20,302	1,55,69,751
Subsidized „ Land and subsidy	7,07,206	3,93,167	1,24,761	6,94,486
Miscellaneous railway expenditure	5,16,639	8,86,011	6,98,052	10,55,292
Total charges against Revenue	27,52,72,456	28,74,84,728	29,45,87,630	30,71,56,545
Net loss—Net gain +	—46,06,287	+ 8,72,391	+ 1,15,41,198	+ 20,41,636

3. The net gain or loss shown in the foregoing table has been arrived at without excluding from the annual Revenue charges that portion of the annuity payments which represents redemption of Capital, and the figures do not, therefore, give the real result to the State of the working of the railways. If this portion of the annuities, which actually represents instalments of the price which has to be paid for the railways purchased from companies, were excluded from the ordinary

* Four per cent. on capital outlay to the 31st March 1900, and 3½ per cent. on outlay subsequent to that date, except on capital outlay on the East Indian railway from 1st July 1895, and on the loan of one crore from His Highness the Maharaja Holkar for the Holkar railway, on which interest is charged at 3½ and 4½ per cent., respectively.

Financial results to the State.

Revenue charges, the result to the State of the working of the railways would have been—

In 1899 a loss of	Rs.	12,29,010.
In 1900 a gain of	„	68,90,143.
In 1901 a gain of	„	2,04,19,695.
In 1902 a gain of	„	1,12,06,714.

4. The number of miles added to the railway systems in these years were 1,484 in 1899, 1,237 in 1900, 576 in 1901, and 566 in 1902, or a total in the last four calendar years of 3,863 miles.

5. The expenditure side of the account is further heavily weighted by the terms of the contracts of two Guaranteed railways, which require payment of interest at a higher rate than is now necessary, and the calculation of the surplus profits at 22 pence to the rupee, while the current rate of exchange is nearer 16 pence. The two contracts are terminable, one on the 31st December 1905 and the other on the same date in 1907.

Railways opened.

Railways opened.
App. 1, 2 and 3.

6. During the year under review, 566 miles were added to the railway systems of India, bringing the total mileage open at the close of the year up to 25,931 miles. The addition, between the 1st January and the 30th April 1903, of 630 miles increased the total on the 1st of May 1903 to 26,561 miles, of which 14,346 were on the 5′ 6″ gauge, 11,247 on the metre or 3′ $3\frac{3}{8}$″ gauge, and 968 on narrower gauges. Steam tramways running outside municipal limits are included in these figures, as they are treated as "Light railways" in this report.

Yearly additions to mileage.
App. 4.

7. The mileage opened year by year, under each railway administration, and during the Viceroyalty of each Governor General, is detailed in Appendix 4.

8. The principal railways opened during 1902 and between the 1st January and 30th April 1903 were—

(*a*) The branch of the East Indian railway on the 5′ 6″ gauge, 78 miles, from Sone East bank (Barun) to Daltonganj, which has been constructed with the main object of opening up the Palamow coal-fields.

(*b*) The extension of the 3′ $3\frac{3}{8}$″ gauge section of the Eastern Bengal State railway, 39 miles, from Mogalhat to Dhubri, which constitutes a portion of the link to connect the railways in Bengal with those in Assam at present terminating at Gauhati.

(*c*) The branch of the Bengal-Nagpur railway on the 5′ 6″ gauge, 114 miles, from Midnapore to Bhojudih, which constitutes a link in the direction of providing an independent access to Calcutta from the United Provinces of Agra and Oudh *viâ* Gya; and the first section of the Jubbulpore-Gondia 2′ 6″ gauge extension, 74 miles, from Gondia to Neinpur, which connects Jubbulpore more directly with stations on the Bengal-Nagpur railway and opens up the isolated Satpura plateau.

(*d*) The Siwait-Sultanpur section of the Allahabad-Fyzabad, 5′ 6″ gauge, branch of the Oudh and Rohilkhand State railway, 47 miles, which will provide more rapid means of communication with Bombay, especially to the districts north of the Lucknow-Fyzabad-Benares loop line, and will greatly add to the prosperity of the fertile and densely populated country traversed by the branch.

(*e*) The extension of the military section of the North Western State railway from Khusalgarh West *viâ* Kohat to Thal, 92 miles, on the 2′ 6″ gauge; and the Northern section of the Jech-Doab line from Malakwal to Sargodha in the Karana hills, 46 miles, on the 5′ 6″ gauge, which will help in the development of the large area of waste land to be colonized and brought under cultivation in the Doab.

(*f*) The "Branch Line," 3′ 3⅜″ gauge, railway, 34 miles, from Sabarmati to Dholka.

(*g*) The first section of the Shoranur-Cochin railway, 65 miles, from Shoranur to Ernakulam, on the 3′ 3⅜″ gauge, which connects the Native State of Cochin with the Madras railway system.

(*h*) The sections of the Bengal Dooars extension railway from Oodlabari to Bagrakote, 3 miles, and from Chalsa to Dalgaon, 29 miles, on the 3′ 3⅜″ gauge.

(*i*) The last section of the Bikanir-Bhatinda railway, 88 miles, from Suratgarh to Bhatinda, on the 3′ 3⅜″ gauge, which affords a direct route between the railways in Northern India and Rajputana.

(*j*) The extension of the South Indian railway, 89 miles, from Madura to Mandapam near the Pamban Pass on the 3′ 3⅜″ gauge.

(*k*) The first section of the Tinnevelly-Quilon, 3′ 3⅜″ gauge, railway, 19 miles, from Tinnevelly Bridge to Kalladaikurichi, which connects the Native State of Travancore with the South Indian railway system.

(*l*) The sections of the Ganges-Gogra Doab lines of the Bengal and North-Western railway, (1) from Azamgarh to Shahganj, 35 miles; and (2) from Phepna (Ballia) to Ghazipur Ghat, 31 miles, on the 3′ 3⅜″ gauge.

(*m*) The last link of the Assam-Bengal, 3′ 3⅜″ gauge, railway, 55 miles, from Lakwa to Tinsukia which connects Gauhati with the Dibru-Sadiya railway.

(*n*) The last section of the 3′ 3⅜″ gauge extension of the Burma railways in the Northern Shan States, 51 miles, from Hsipaw to Lashio; and the extension, 114 miles, from Letpadan, on the Irrawaddy section *vid* Henzada to Bassein, also on the 3′ 3⅜″ gauge.

Mileage to be constructed.

9. Sanction was given during the year 1902 to the construction of 1,107 miles of railway, making up a total of 2,895 miles sanctioned and still to be constructed on the 31st December 1902. The principal lines sanctioned were

App. 5.

	Miles.
5′ 6″ gauge—	
Manpur to Hariharpur, Gya-Katrasgarh line (East Indian railway)	100
Shikohabad to Farukhabad (East Indian railway)	66
Agra-Delhi Chord	121
Ranaghat to Moorshedabad (Eastern Bengal State railway)	75
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3′ 3⅜″ gauge—	
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Bellary to Rayadrug	33
Hospet to Kottur	38
2′ 6″ gauge—	
Famine lines, Madras Presidency.	
Morappur to Dharmapuri	18
Tirupattur to Krishnagiri	26

The principal lines sanctioned between the 1st January and the 30th April 1903 were: a branch of the Oudh and Rohilkhand State railway from Meerut to Hapur, 19 miles, on the 5′ 6″ gauge; and extensions of the Bengal and North-Western railway from (1) Uska Bazar to Tulsipur, 54 miles, (2) Gaisanri to Jarwa, 13 miles, (3) Gorakhpur to Bagaha, 61 miles, and (4) Kopaganj to Dhorighat, 22 miles, on the 3′ 3⅜″ gauge.

Projects for new lines.

Railway surveys.

Projects for new lines.

10. The negotiations which, at the close of last year, appeared to have been practically concluded for the construction, on the 3′ $3\frac{3}{8}$″ gauge, of the Kurnool Road (Dhone)-Kurnool railway, (Madras), 32 miles, and the Bezwada-Masulipatam railway (Madras), 50 miles, are still proceeding, the Promoters having asked for certain modifications of the terms offered.

The scheme for the construction, on the 2′ 6″ gauge, of the Raichur-Wondalli railway, (Hyderabad), 43 miles, the concession for which was granted to the Wondalli (Deccan) Gold Mines Company and the Hyderabad (Deccan) Company in June 1900, has not advanced any further.

Revised proposals, which are under consideration, have been received from the Promoters for the construction of the Amritsar-Tarn Taran-Patti railway, (Punjab), about 27 miles in length.

The negotiations for the following lines, which were stated in last year's report to have been progressing, still continue:

	Miles.
Kangra Valley (Punjab)	87
Jullundur-Hoshiarpur (Punjab)	24
Vizianagram-Raipur with Sointilla branch (Madras and Central Provinces)	359
Barun-Ajmer-Marwar (Rajputana)	213
Burdwan-Cutwa (Bengal)	34
Hooghly-Cutwa-Ahmedpur-Ondal (Bengal)	139

Negotiations are also proceeding for the—

Berhampore-Russelkonda (Madras)	49
MacLeod Ganj Road-Fazilka-Ferozepore-Ludhiana (Punjab)	150
Rawalpindi-Murree with extension to Kuldana and Gharial (Punjab)	50

Negotiations which were opened for the grant of concessions for the construction of the Shibnibash (Kissengunge)-Kotchandpur-Magura railway, (Bengal), 64 miles, and the Phulbari-Sumjhia railway, (Bengal), 13 miles, have not progressed.

The concession which was granted for the Tilagaon-Sylhet railway, (Assam), 39 miles, and the Akhaura-Bhairab Bazaar railway, (Bengal), 19 miles, has lapsed, while the negotiations for the Fatehpur-Markundi railway, (United Provinces), 61 miles, have been dropped by the Promoters.

Earnings per mile per week.

App. 6.

Income of each railway.

App. 7.

11. In Appendix 6 are recorded the gross earnings per mile per week of each railway from the date of opening and the proportion of the working expenses to the gross earnings, and in Appendix 7, the subsidies and rebates received by assisted lines under the Branch Line terms, and the time each line took in earning enough to be independent of such assistance.

Railway surveys.

Railway surveys.

12. The following surveys were completed during 1902:

Bengal-Nagpur railway.—Lines from (1) Gondia to Chanda, 130 miles; (2) Nagpur to Brahmapuri, 55 miles; and (3) the Bankura-Calcutta Chord, 130 miles; all on the 5′ 6″ gauge.

Bombay, Baroda and Central India railway system.—A line from Ranu on the Padra-Mhoba extension of the Gaekwar's Dabhoi railway to Dabka, 5·80 miles, on the 2′ 6″ gauge.

Burma railways.—Lines from (1) Pegu to Martaban and Moulmein, 114 miles; (2) Pegu to Syriam and Dalla to Dedaye, 138 miles; and (3) Thazi to Taunggi, 120 miles; all on the 3′ $3\frac{3}{8}$″ gauge.

Eastern Bengal State railway.—(1) Chitpore terminal improvements including the branches to Cossipur Road and Ultadingi, 4 miles; (2) a chord line from Narculdanga to a point of junction with the main line south of Gobra road overbridge on the Southern section, 1·69 miles; (3) a chord line from Kancoorgachi block station to a point of junction with the main line near No. 3 overbridge on the Southern section, 2·26 miles; all on the 5′ 6″ gauge.

East Indian railway.—Lines from (1) Ondal to Bancola, 7·10 miles; (2) mile 170⅞ on the Jherriah branch to Chandore, 4·16 miles; (3) Bhagalpur to Barari ghat, 2·14 miles; (4) Tasra siding, 2·36 miles; (5) Direct access to Agra City, 3 miles; and (6) reconnaissance survey from Gya to Katwa, 250¼ miles; all on the 5′ 6″ gauge.

Madras railway.—The final location survey of the Azhikal-Mangalore extension, 77·27 miles, on the 5′ 6″ gauge.

Morvi railway.—A preliminary survey between Wadhwan and Than *viâ* Tikar, 31 miles, on the 3′ 3⅜″ gauge.

North Western State railway.—Lower Sind Extension from (1) Hyderabad to Badin, 61 miles; (2) Hyderabad *viâ* Badin to Sarani, 72 miles; (3) Badin to Jungshai, 70 miles; and (4) Tando Mohammad Khan to Mirpore-Batora, 33 miles; all on the 5′ 6″ gauge.

Oudh and Rohilkhand State railway.—A line from Hardoi to Sandi, 14·39 miles, on the 5′ 6″ gauge.

Southern Mahratta railway.—A light railway from Guntur to Repalle, 38 miles.

Tarakeshwar-Magra railway.—A branch line from Magra to Tribeni, 2·15 miles, on the 2′ 6″ gauge.

13. The following surveys are in progress:

Assam-Bengal railway.—A line from Kalaura or Tilagaon to Fenchuganj and thence to Sylhet, 34 miles, on the 3′ 3⅜″ gauge.

Bengal and North-Western railway.—A branch line from Burhwal to Sitapur, 58 miles, on the 3′ 3⅜″ gauge.

Bombay, Baroda and Central India railway system.—A line from Vijapur on the Vijapur-Kalol-Kadi railway to Zankavao, 37½ miles, on the 2′ 6″ gauge.

East Indian railway.—A line from Hariharpur to Asansol, 52·35 miles, on the 5′ 6″ gauge.

Great Indian Peninsula railway.—A railway from Itarsi to Warungal comprising lines from (1) Itarsi to Nagpur, 200 miles; (2) Multai to Wardha, 91 miles; (3) Warora to Bellarpur, 160 miles; and (4) Bellarpur to Warungal, 38 miles; all on the 5′ 6″ gauge.

North Western State railway.—(1) Southern section of the Jech Doab railway from Sargodha to Shorekot Road or Toba Tek Singh, 105 miles, on the 5′ 6″ gauge; (2) extension of the proposed Amritsar-Tarn Taran railway from Tarn Taran to the site of the Hariki Weir near Sobraon, on the 5′ 6″ gauge, and a reconnaissance of two alternative extensions from Sobraon to Ganda Singh Wala and Tarn Taran to Putti Kasur, on the 5′ 6″ gauge; (3) Ferozepore to MacLeod Ganj, 90 miles, on the 5′ 6″ gauge; (4) chord line from Shahdera (Lahore) to Lyallpur, 72 miles, on the 5′ 6″ gauge, and an alternative from Shahdera to Sangla, 52 miles, on the 5′ 6″ gauge; and (5) an extension of the proposed Jullundur-Hoshiarpore-Kapurthala railway from Kapurthala to Sultanpur, on the 2′ 6″ gauge.

Oudh and Rohilkhand State railway.—A branch line from Gujraula to Chandpur, 21 miles, on the 5′ 6″ gauge.

South Indian railway.—An extension of the Pamban branch to Rameswaram 10 miles, on the 3′ 3⅜″ gauge.

Capital.

Capital outlay. App. 7 & 11.

14. The total expenditure borne against Capital, both on railways open and railways under construction, to the close of the calendar year 1902 was Rs. 3,53,91,28,709 made up as follows:

	Mileage.*			Capital outlay to close of year.		
	Open.	Under construction.	Total.	Open lines.	Lines under construction.	Total.
				Rs.	Rs.	Rs.
Guaranteed railways under old contracts	1,348·78	61·07	1,409·85	24,87,95,438	81,07,210	25,69,02,648†
Guaranteed railways under new contracts	91·41	...	91·41	57,54,479	...	57,54,479
State lines worked by Companies	13,668·11	625·96	14,294·07	1,95,51,64,692	6,57,48,487	2,02,09,13,179
State lines worked by the State...	5,201·05	541·60	5,742·65	82,44,12,854	2,06,66,547	84,50,79,401
Assisted Companies ...	2,227·38	140·91	2,368·29	15,33,48,022	1,25,24,776	16,58,72,798
Native State lines	3,217·45	79·26	3,296·71	17,92,08,988	17,75,824	18,09,83,912
Lines in Foreign territory ...	73·61	...	73·61	1,76,01,122	...	1,76,01,122
District Boards' lines ...	71·41	33·88	104·99	31,58,026	6,60,176	38,18,202
Total open lines and lines partly open	25,898·90	1,482·68	27,381·58	3,38,74,42,721	10,94,83,020	3,49,69,25,741
Railways wholly under construction	...	707·25	707·25	...	2,40,70,418	2,40,70,418
Grand total outlay on railways	...	2,189·93	28,088·83	3,38,74,42,721	13,35,53,438	3,52,09,96,159
Unclassified expenditure including surveys and collieries ...	...	...	...	...	...	1,81,32,550
Grand total capital outlay in India	...	...	...	3,38,74,42,721	13,35,53,438	3,53,91,28,709

Sterling capital. App. 8.

15. The total sterling capital raised by Companies and paid over to the Secretary of State up to the close of the calendar year 1902, and the amount subsequently withdrawn for expenditure by Companies during and up to the close of the calendar year 1902 were as follows:

	Amount raised up to 31st December 1902.	Amount withdrawn in 1902.	Amount withdrawn up to 31st December 1902.
	£	£	£
Guaranteed railways	22,411,054	445,313	22,954,421
State lines leased to Companies . .	33,564,178	1,773,931	37,773,035
TOTAL . .	55,975,232	2,219,244	60,727,456

Budget allotments for capital expenditure. App. 9.

16. The total budget allotment for the official year 1901-1902 was originally Rs. 10,32,44,000, but was subsequently reduced to Rs. 9,38,55,000. For the official year 1902-1903 it was Rs. 11,00,00,000, but this was afterwards reduced to Rs. 10,34,58,000 owing to short outlay in England against the amounts placed at the disposal of the Secretary of State and some of the Railway Companies' Boards for purchase of rolling-stock, stores, etc., and as intimation of the failure to spend the money allotted was not received until December, it was not possible to utilise the surplus in India.

* Excludes railways on account of which no capital outlay is recorded.
† Excludes the State outlay on the Patri Branch which is included under "Unclassified expenditure."

Capital.

17. The actual capital expenditure during the calendar year 1902 on railways for the financing of which the State is responsible, amounted to Rs. 9,94,00,000, the gross capital outlay on all railways in India during the same period being Rs. 11,59,00,000. This amount was spent in constructing 2,869 miles of railway, 566 miles of which were completed and opened for traffic during the year, and in providing additional rolling-stock and other facilities for carrying the growing traffic of the several railways. Capital expenditure in 1902. App. 10.

18. For the official year 1903-1904 provision has been made in the "Railway Programme," that is, for capital expenditure on railways for which the State finds the funds either by direct payment or by guarantee, as follows: Budget allotments for 1903-04.

	Rs.
For expenditure on open lines	(a) 5,76,68,000
" " " lines under construction . . .	4,44,24,000
" " " new lines proposed to be begun in 1903-04	79,08,000
TOTAL	11,00,00,000

19. In framing this "Programme," the amount required to meet the needs of open lines, so far as they can be foreseen, has been regarded as a first charge upon the money available for railway purposes, and every effort has been made to provide in full for all demands arising out of the development of existing traffic; next in order, provision has been made for the steady prosecution and early completion of lines in progress, preference under this head being given to Companies' lines over those under construction by the agency of the State and, lastly, provision has been made for new projects for which the State provides funds.

20. In Appendix No. 10 is presented the capital expenditure during the past ten years on each railway in India on— Capital expenditure on new lines, etc. App. 10.

(a) New lines in extension of, or now worked by, existing lines.

(b) Rolling-stock.

(c) Improvement of existing lines.

Summarised, the figures are as follows:

EXPENDITURE *in lakhs* ON LINES WHICH ARE INCLUDED IN THE "RAILWAY PROGRAMME," THAT IS, FOR WHICH THE STATE FINDS OR GUARANTEES THE FUNDS.							EXPENDITURE *in lakhs* ON PRIVATE COMPANIES' LINES OR NATIVE STATES' LINES, WHICH FALL OUTSIDE THE "RAILWAY PROGRAMME."					
YEAR.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 2+3+4.	New lines in extension of, or now worked by, existing lines.	Total capital expenditure 5+6.	Total capital expenditure 12+13.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 9+10+11.	New lines in extension of, or now worked by, existing lines.
1	2	3	4	5	6	7	8	9	10	11	12	13
1893	70	1,06	8	1,84	2,03	3,87	47	4	12	—8	8	39
1894	45	1,83	41	2,69	2,83	5,52	60	...	10	—3	7	53
1895	91	1,10	34	2,35	3,44	5,79	1,66	7	10	22	39	1,27
1896	65	1,42	56	2,63	4,17	6,80	2,38	14	3	30	47	1,91
1897	1,25	1,38	53	3,16	5,56	8,72	3,09	12	11	12	35	2,74
1898	1,20	1,05	—59	1,66	5,45	7,11	3,33	24	17	9	50	2,83
1899	2,25	1,50	—7	3,68	5,72	9,40	3,00	43	10	—8	45	2,55
1900	1,49	1,56	23	3,28	4,15	7,43	1,57	29	13	—13	29	1,28
1901	1,74	1,82	53	4,09	3,73	7,82	1,83	25	29	—2	52	1,31
1902	2,56	2,15	35	5,06	4,88	9,94	1,65	28	20	—6	42	1,23

(a) Includes reserve of Rs. 74,08,000 for new lines.

Traffic and earnings.

Passenger traffic.

It will be seen from the foregoing statement, that for many years the amount of money which was available for capital expenditure was so limited, that the larger portion of it had to be devoted to new lines if any progress was to be made in railway construction. But the needs of existing lines yearly grew more pressing, and to meet them, without at the same time retarding the construction of new lines, the "Railway Programme" has from time to time been increased, until it now stands, as has been shown in paragraph 18, at 11 crores of rupees for the official year 1903-04, over half of which has been appropriated to the improvement of existing lines.

Capital outlay under heads of account.

App. 11.

21. The Capital outlay under the several heads of expenditure on railways, both open and still under construction, up to the close of the calendar year 1902, is presented in Appendix 11.

Traffic and earnings.

Traffic and earnings.

App. 12 and 13.

22. The following statement shows the volume of the traffic, the average distance it was carried and the earnings under the several heads of account during the past five years:

Year.	Open mileage.	Coaching (Passenger) traffic.			Earnings from other coaching traffic in thousands of rupees.	Goods traffic.			Electric telegraph in thousands of rupees.	Steamboat and sundries in thousands of rupees.	Gross earnings from all sources in thousands of rupees.
		Number of passengers in thousands.	Earnings in thousands of rupees.	Average miles carried.		Tons in thousands.	Earnings in thousands of rupees.	Average miles carried.			
1898	22,024*	151,566	7,58,68	38·53	1,10,28	35,642	17,84,97	160·25	7,49	79,89	27,41,31
1899	23,507*	161,720	8,09,39	38·48	1,13,19	39,748	19,19,82	155·15	8,70	85,68	29,36,78
1900	24,704†	176,308	8,95,07	40·09	1,31,37	42,896	20,36,52	154·94	7,93	83,43	31,54,32
1901	25,332‡	194,749	10,07,77	40·42	1,34,71	43,392	21,23,67	162·75	7,49	87,34	33,60,38
1902	25,898‡	196,648	10,27,48	40·03	1,47,60	45,537	21,23,43	157·54	7,32	86,88	33,92,69

General remarks.

23. With 566 miles added to the railway systems, the total earnings exceeded those of 1901 by about one per cent.

The increase in earnings was contributed wholly by coaching traffic, under which head there would have been still better results had the spread of plague not rendered it necessary to restrict gatherings at the larger fairs.

In the earnings from goods traffic there was a slight decline, although a greater tonnage was carried under all heads, except coal. This is commented upon in paragraph 28.

Passenger traffic.

Passenger traffic.

App. 12, 13, 14 and 15.

24. Turning to the details of traffic, the following table shows the number of passengers of each class carried, the earnings therefrom, and the average rate charged each passenger:

Year.	Number carried in thousands.					Earnings in thousands of rupees.					Average rate charged per mile (including season and vendors' tickets in pies).			
	Ordinary passengers.				Season and vendors' tickets.	Ordinary passengers.				Season and vendors' tickets.				
	1st.	2nd.	Inter.	3rd.		1st.	2nd.	Inter.	3rd.		1st.	2nd.	Inter.	3rd.
1898 .	611	2,253	5,073	131,512	12,117	31,24	45,28	49,49	6,25,52	7,15	12·40	4·93	3·13	2·29
1899 .	526	2,352	5,233	140,321	13,288	31,53	46,97	52,08	6,70,81	8,01	12·59	5·32	3·07	2·30
1900 .	521	2,285	5,703	153,934	13,845	31,83	47,08	56,03	7,51,66	8,47	12·59	5·49	3·11	2·31
1901 .	532	2,405	6,670	170,416	14,726	32,78	52,43	64,39	8,48,25	9,32	12·75	5·49	3·09	2·31
1902 .	563	2,530	6,813	171,716	15,026	38,57	56,59	67,60	8,54,97	9,75	12·86	5·21	3·11	2·33

* Excludes the Cherra-Companyganj and Thaton-Duyinzaik Light railways.
† Excludes the Thaton-Duyinzaik and Powayan Light railways.
‡ Excludes the Thaton-Duyinzaik and Parlakimedi Light railways.

Passenger traffic.

Goods traffic.

25. Compared with the previous year, the passenger traffic increased as under:

	Number.	Earnings. Rs.
First class	31,000	5,79,000
Second class	125,000	4,16,000
Intermediate class	143,000	3,21,000
Third class	1,300,000	6,72,000
Season tickets	300,000	43,000
	1,899,000	20,31,000

Although there was a comparatively small increase in the number of first class passengers carried, the additional revenue derived by railways was only Rs. 93,000 less than that derived from the carriage of 1,300,000 additional third class passengers.

The majority of railways report an improvement, a sign that passenger traffic continues to develop generally. Other factors were the opening of new lines and the Coronation Durbar held at Delhi in the early part of January 1903.

The lines which recorded the larger increases were the North Western State, Great Indian Peninsula, Madras, Bengal and North-Western, Southern Mahratta and South Indian railways. The East Indian railway appears on the other side of the account, principally owing to a fall in its pilgrim traffic.

The total number of passengers slightly exceeded 196½ millions, of which 171¾ millions, or 87·32 per cent., were third class passengers.

26. It may be of interest to record here the growth of passenger traffic during the last twenty years, and the reduction in the average rate charged per passenger per mile.

Year.	Open mileage.	Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.
1882	10,149	58,876	4,64,41	3·08
1887	14,103	95,412	6,03,11	2·83
1892	17,815	127,388	6,91,15	2·52
1897	21,115	150,584	7,61,95	2·47
1902	25,898	196,648	10,27,48	2·50

This represents an increase of 155 per cent. in the mileage, of 230 per cent. in numbers, and of 121 per cent. in earnings, while the average rate charged has decreased by 19 per cent., as compared with 1882.

Goods traffic.

27. The quantity of goods carried and the earnings therefrom are shown under the several heads in the following table: **Goods traffic.** App. 12, 13, 16 and 17.

Year.	Quantity carried in thousands of tons.					Earnings in thousands of rupees.				
	General merchandise.	Coal and coke for the public and foreign railways.	Military stores.	Revenue stores, including coal and material for construction.	Total, including items not detailed.	General merchandise.	Coal and coke for the public and foreign railways.	Military stores.	Revenue stores, including coal and material for construction.	Total, including items not detailed.
1898 .	21,155	6,031	116	8,074	35,642	14,87,17	1,74,65	21,19	81,38	17,84,97
1899 .	23,902	6,221	59	9,330	39,748	16,10,55	1,80,41	13,11	94,11	19,19,82
1900 .	27,301	7,309	58	8,925	42,896	16,90,35	2,11,71	13,78	93,32	20,36,52
1901 .	25,458	8,249	63	9,528	43,392	17,53,14	2,35,01	14,97	96,41	21,23,67
1902 .	25,840	8,034	100	11,487	45,537	17,40,72	2,26,75	21,67	1,14,93	21,23,41

Goods traffic.

28. The total weight lifted increased, as compared with 1901, by 2,145,000 tons, while the earnings were less by Rs. 26,000.

A larger quantity of "General merchandise" was carried this year, but, owing to a reduction in the lead in many cases, the earnings under this head were not equal to those of last year. The principal losses occurred under *Grain and pulse* and *Rape and mustard seed*. The country's return to normal conditions rendered necessary a smaller movement in the lower classes of food stuffs, and the loss in this traffic was felt by many railways, but chiefly by the Rajputana-Malwa, the Great Indian Peninsula, the North Western State, the Bombay, Baroda and Central India, and the Oudh and Rohilkhand State railways. Further, railways lying in Bengal earned considerably less from rice, because of the partial failure of the crops in some districts. Wheat on the other hand was more largely exported from Kurrachee and Bombay, which helped to reduce the deficit under *Grain and pulse*.

There was little or no movement to the ports of *Rape and mustard seed*, and the railways most effected thereby were the North Western State, the Rajputana-Malwa, and the East Indian.

29. The East Indian railway accounts for the entire loss under coal, there having been a lull in its export to places where stocks have accumulated, notwithstanding that the rates for coal were reduced from the 17th August 1902.

Coal. App. 16, 17, 28 and 29.

The output from the collieries increased from 6,635,727 tons in 1901 to 7,360,405 tons in 1902. Exports to Indian ports proper fell from 1,157,892 tons to 974,602 tons, but English coal successfully competed at Bombay principally, with Indian coal, as its imports rose from 112,519 tons to 198,574 tons. The exports to other ports including Burma fell from 845,953 to 728,316 tons, and the imports of other than English coal from 79,108 tons to 20,773 tons.

The quantity of Indian coal consumed by railways increased from 1,956,631 tons to 2,096,095 tons.

30. There was a considerable rise in the earnings from "Military stores," due mainly to the carriage of larger quantities of grass and fodder.

Military stores. App. 16 and 17.

31. The increase under "Revenue stores and material" was derived principally from the carriage of railway material for the Jech-Doab, the Satpura, the Midnapur-Jherriah and the Eastern Bengal State railways for construction purposes. The material for renewals of rolling-stock and permanent-way was also carried in larger quantities, chiefly over the East Indian railway.

Revenue stores and material for construction. App. 16 and 17.

Principal commodities. App. 18 and 19.

32. The classified items which contributed most towards the earnings of the year, and their figures in 1901 are given below:

	1902.		1901.	
	Quantity.	Earnings.	Quantity	Earnings.
	Tons.	Rs.	Tons.	Rs.
Grain and pulse	7,539,816	4,88,50,998	8,927,180	5,13,48,342
Coal	8,026,590	2,26,76,009	8,245,804	2,35,01,922
Cotton, raw and manufactured	1,455,869	2,25,27,624	1,348,705	2,20,72,238
Oil seeds	2,356,418	1,65,28,043	2,447,160	1,88,41,600
Sugar	1,378,871	1,07,26,791	1,444,311	1,13,04,219
Salt	1,616,163	95,15,866	1,626,590	93,85,896

The total weight of these six staples amounts to 22,373,727 tons or 67·55 per cent. of the traffic carried for the public, and their earnings were Rs. 13,08,25,331 or 65·77 per cent. of the gross earnings therefrom. These figures in 1901 were 23,139,750 tons (70·11 per cent.) and Rs. 13,64,54,217 (68·12 per cent.).

The first, second and fourth commodities have been remarked upon already.

Cotton, raw and manufactured.—The earnings under this head improved by a little over 4½ lakhs of rupees, entirely because more raw cotton was exported this year. The lines which earned most thereby were the Rajputana-Malwa, the Bombay, Baroda and Central India, the Southern Mahratta and the East Indian railways.

There was a better traffic in Indian twist and yarn. In piece goods, both European and Indian, while the tonnage increased the earnings decreased, owing to the traffic having been carried for shorter distances.

Sugar.—The decrease of nearly 8 lakhs of rupees in the earnings from *gur, rab, jaggery*, etc., was borne almost entirely by the Great Indian Peninsula and the Rajputana-Malwa railways, the crop not having been as good as it was last year. In the case of the Great Indian Peninsula railway, an additional reason was the reduction in freight charges. The North Western State railway reports a larger traffic in refined sugar, chiefly Austrian.

Salt.—The increase was shared between the Bengal-Nagpur and the Great Indian Peninsula railways. The former carried increased quantities of Ganjam and Bhyander, as also Liverpool salt, and the latter secured a longer lead for its traffic.

The principal fluctuations were :

	Increase.		Decrease.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Grain and pulse	...	...	487,364	24,97,344
Oil seeds	...	...	90,742	23,13,557
Metals	151,308	13,90,295	...	...
Jute	186,979	11,92,946	...	...
Coal	...	...	219,214	8,25,913
Sugar	...	...	65,440	5,77,428
Wood	96,969	5,01,555	...	...
Cotton (raw)	94,993	4,82,864	...	...
Fodder	35,939	4,32,671	...	...

The more important items in the above statement, which have not already been remarked upon, are *Metals* and *Jute*.

Metals.—There was an improvement under all the sub-heads of *metals*. The carriage of Manganese ore to Bombay and Vizagapatam for export, and of "wrought" and "manufactured" iron *vid* Kurrachee for the Jech-Doab railway, and *vid* Bombay for stations on the Indian Midland railway, gave the largest increases.

Jute.—The Eastern Bengal State and the East Indian railways are the principal carriers of this article, and the increased earnings recorded by them were due chiefly to native dealers getting rid, in the early part of the year, of stocks held over on account of a dull market towards the close of the previous year.

33. The following statement shows the development of goods traffic during the last twenty years :

Year.	Mileage open.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per mile in pies.
1882	10,149	14,833	10,15,97	7·91
1887	14,103	20,196	11,92,93	7·17
1892	17,815	26,335	14,77,52	6·70
1897	21,115	33,926	15,88,89	6·36
1902	25,898	45,537	21,23,41	5·68

While the mileage has increased 155 per cent., tonnage has increased 207 per cent., earnings 109 per cent., and the average rate has fallen 28 per cent.

Fares and rates.

Fares and rates.

Train, vehicle and ton mileage.

34. With a view to the development of the coal industry in India, the following reduced scale of rates for coal, coke and patent fuel, at owner's risk, in full wagon loads, subject to a minimum charge of $\frac{1}{10}$th pie per maund per mile on the through distance, were introduced on the East Indian, Eastern Bengal State, Bengal-Nagpur, Oudh and Rohilkhand State, and North Western State railways, with effect from the 17th August 1902:

	Pie per maund per mile.
For all distances up to 75 miles inclusive	0·14
Plus for any distance in excess of 75 miles and up to 200 miles, inclusive	0·12
Plus for any distance in excess of 200 miles and up to 450 miles, inclusive	0·10
Plus for any distance in excess of 450 miles and up to 1,000 miles, inclusive	0·09

and rebates on coal other than export coal, were discontinued from the same date.

These rates were also adopted by the administration of the Bengal Central railway in bookings from colliery stations to Khoolna, *viâ* Khoolna and *viâ* Jhikergacha Ghât only.

Train, vehicle and ton mileage.

Train, vehicle & ton mileage.
App. 20 and 21.

35. The following table shows the train, vehicle and ton mileage of coaching and goods traffic:

Year	Train-mileage. (Omitting 000.)				Vehicle-mileage. (Omitting 000.)			Ton-mileage. (Omitting 000.)		
	Coaching.	Goods.	Mixed	Total including miscellaneous train-mileage.	Coaching.	Goods.	Total.	Coaching.	Goods.	Total.
1898 .	16,620	28,024	25,449	71,520	551,861	1,102,030	1,653,891	6,468,321	14,604,953	21,073,274
1899 .	17,039	30,612	26,879	77,207	571,119	1,213,611	1,784,730	6,800,273	15,909,787	22,710,060
1900 .	18,114	34,252	28,827	84,193	612,017	1,323,001	1,935,018	7,326,297	17,231,511	24,557,808
1901 .	19,701	34,274	31,561	88,265	670,834	1,325,839	1,996,673	8,147,469	17,956,732	26,104,201
1902 .	21,588	35,935	31,781	92,527	742,965	1,354,473	2,097,438	8,958,193	18,764,575	27,722,768

36. The mileage in each case was greater than in the previous year, due to more traffic having been carried, and also in the case of train-mileage to the opening of new lines.

The increases in the number of passengers, the earnings therefrom and the passenger train-mileage were 0·98 per cent., 2·02 per cent. and 9·58 per cent., respectively. The improvement reported by some railways in long distance traffic, and the increases in the higher classes of passengers account for the earnings having improved in greater proportion to numbers; but the increase in train-mileage points to the running of unnecessary trains (unnecessary perhaps only at present), since the average number of passengers in a train has fallen in several cases.

The tonnage of goods traffic increased by 4·94 per cent., the train-mileage by 4·85 per cent. while the earnings decreased by 0·01 per cent. The carriage of a greater quantity of "General merchandise" over shorter distances and of "Revenue stores and material" which give a small return, explain these figures.

Earnings per mile worked and per train-mile.
App. 12, 22 and 23.

37. The gross earnings per mile worked and per train-mile showed a decrease and were as follows:

Year.	Per mile worked. Gross earnings, excluding steam-boat, in rupees.			Per train-mile.
	Coaching.	Goods.	Total, including "other earnings," except steam-boat.	Gross earnings, excluding steam-boat, in rupees.
1898 .	4,046	8,312	12,703	3·81
1899 .	4,038	8,405	12,788	3·78
1900 .	4,254	8,444	13,007	3·73
1901 .	4,517	8,404	13,236	3·79
1902 .	4,589	8,293	13,188	3·65

Working expenses.

38. The working expenditure on all railways taken collectively is shown in the following table: Working expenses. App. 12, 24, 25, 26 and 27.

Year.	Working expenses in thousands of rupees.	Proportion per cent. of working expenses to gross earnings.	Working expenses, excluding steam-boat, per mile worked in rupees.	Working expenses, excluding steam-boat, per train-mile in rupees.
1898 .	12,98,68	47·37	6,003	1·80
1899 .	13,93,36	47·45	6,055	1·79
1900 .	15,09,31	47·85	6,204	1·78
1901 .	15,72,45	46·79	6,179	1·77
1902 .	16,70,49	49·24	6,472	1·79

Increases appear in the expenditure of all departments, but principally in those connected with the up-keep of the permanent-way and rolling-stock. This is due to the heavy renewals some of the older railways are now called upon to undertake. A portion of the increase was also occasioned by a larger traffic.

39. There was an improvement in some respects in the prices paid for material, as the following table shows:

Year.	Iron.								Steel.			
	Bar.		Pig.		Plate.		Sheet.		Mild Bar.		Rails.	
	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1898 . .	8 5 0	6 10 0	3 12 6	2 12 6	9 0 0	6 11 3	10 0 0	7 7 6	7 7 6	5 7 6	5 5 0	4 7 6
1899 . .	10 10 0	8 0 0	3 19 0	3 16 0	11 0 0	9 0 0	11 0 0	9 10 0	10 5 0	6 15 0	7 2 6	4 12 0
1900 . .	10 15 0	10 10 0	3 16 6	3 16 6	12 0 0	11 10 0	12 17 6	11 4 0	12 5 0	7 17 6	7 10 0	6 0 0
1901 . .	9 10 0	7 2 6	3 7 6	3 6 6	9 10 6	7 12 6	9 5 0	7 12 6	9 0 0	5 9 6	7 2 6	5 5 6
1902 . .	9 10 0	6 14 6	3 5 0	3 0 0	8 10 0	7 12 6	9 5 0	7 12 6	9 0 0	5 9 6	6 5 0	5 2 6
Difference between 1901 and 1902.	...	—0 8 0	—0 2 6	—0 6 6	—1 0 6	...	...	...	...	...	—0 17 6	—0 3 0
Decrease per cent.	...	5·6	3·7	9·8	10·5	...	...	...	...	...	11·3	2·8

40. As anticipated in the last report, the quantity of coal imported for consumption by railways, rose slightly, but the total quantity is inconsiderable when compared with that of Indian coal, as will be seen from the following statement: Coal. App. 28 and 29.

Year.	Foreign coal consumed by railways.	Indian coal consumed by railways.
	Tons.	Tons.
1898 .	39,055	1,418,241
1899 .	83,939	1,560,771
1900 .	56,589	1,858,061
1901 .	13,248	1,956,631
1902 .	23,417	2,096,095

41. The railways which own collieries are the East Indian and the North Western State railways, but the latter railway has to look elsewhere for the greater portion of its supply, as the outturn of its collieries is small. Collieries owned by railways or the State. App. 30.

Working expenses. Net earnings.

Working expenses by departments.

App. 24, 25, 26 and 27.

42. The working expenses in the different departments of the railways treated as one system are shown in the following table. (The totals are shown in paragraph 38) :

Year.	Engineering.			Locomotive.			Carriage and Wagon.			Traffic.			General.		
	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.
		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
1898 .	11·44	1,461	0·44	15·67	2,000	0·60	4·87	621	0·19	8·01	1,022	0·31	4·98	635	0·19
1899 .	11·66	1,499	0·44	16·05	2,064	0·61	4·56	587	0·17	7·85	1,010	0·30	4·85	623	0·18
1900 .	11·47	1,500	0·43	16·69	2,183	0·63	4·42	578	0·17	7·90	1,034	0·30	4·67	611	0·18
1901 .	10·59	1,408	0·40	16·64	2,214	0·63	4·52	601	0·17	7·85	1,044	0·30	4·70	625	0·18
1902 .	11·49	1,522	0·42	17·06	2,261	0·62	5·20	689	0·19	8·07	1,069	0·30	4·83	639	0·18

These results are not unsatisfactory, since the increases under the first, second and third heads are attributable in a great measure to renewals of permanent-way and rolling-stock.

The figures connected with these results are, for individual railways, presented in Appendices 24, 25, 26 and 27.

Net earnings.

Net earnings. App. 12 and 13.

43. Turning now to the net earnings, the following table shows what the net earnings were, and what return they would have yielded on the capital expenditure if all the railways in India were treated as one undertaking. The decrease in net earnings was due to the working expenses having risen in a much higher proportion than the increase in the gross earnings :

Year.	Net earnings in thousands of rupees.	Percentage of net earnings on capital outlay.	Net earnings, excluding steam-boat, in rupees.	
			Per mile worked.	Per train-mile.
1898 .	14,42,63	4·94	6,700	2·01
1899 .	15,43,42	5·00	6,733	1·99
1900 .	16,45,01	4·99	6,803	1·95
1901 .	17,87,93	5·27	7,057	2·02
1902 .	17,22,20	4·92	6,718	1·86

44. Recapitulated, the results show an increase in 1902 over 1901 in—

Mileage open of	2·23	per cent.
Coaching traffic—		
Passengers, number of—	0·98	„
Train-mileage	9·58	„
Gross earnings from passengers	2·02	„
Goods traffic—		
Tonnage	4·94	„
Train-mileage	4·85	„
Working expenses	6·23	„
and a decrease in—		
Gross earnings from goods traffic	0·01	„
Net earnings	3·68	„

Summary.

45. Summarised, the general results of working Indian railways during the five years 1898-1902 were as follows:

General results. App. 7 and 12.

Year.	Mileage open on 31st December.	Gross earnings. (Omitting 000.)	Working expenses. (Omitting 000.)	Net earnings. (Omitting 000.)	Per cent. of net earnings on outlay.	Per cent. of expenses to gross earnings.	Per mile worked. (In rupees.)			Per train-mile. (In rupees.)			Gain or loss to State. (Omitting 000.)
							Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
		Rs.	Rs.	Rs.									Rs.
1898	22,024	27,41,31	12,98,68	14,42,63	4·94	47·37	12,703	6,003	6,700	3·81	1·80	2·01	−1,11,63
1899	23,507	29,36,78	13,93,36	15,43,42	5·00	47·45	12,288	6,055	6,733	3·78	1·79	1·99	−46,06
1900	24,704	31,54,32	15,09,31	16,45,01	4·99	47·85	13,007	6,204	6,803	3·73	1·78	1·95	+8,72
1901	25,332	33,60,38	15,72,45	17,87,93	5·27	46·79	13,236	6,179	7,057	3·79	1·77	2·02	+1,15,41
1902	25,898	33,92,69	16,70,49	17,22,20	4·92	49·24	13,188	6,472	6,718	3·65	1·79	1·86	+20,42

46. As compared with last year, while the gross earnings increased, the net earnings, owing to increased expenditure, decreased, but the net result was a gain to the State of Rs. 20,41,636. That the gain was so much less this year was due chiefly to a larger amount having been spent in improving the property of the State.

PART II.

MISCELLANEOUS.

Chief events of the year.

47. The chief events of the year are recorded below:

Report on the working of Indian railways.—Mr. T. Robertson, C.V.O., who had been appointed by His Majesty's Secretary of State for India to investigate the difficulties which exist in the management of Indian railways financially or otherwise, and to report on the best means of overcoming these difficulties, arrived in India in October 1901, and after certain investigations, left the country in April 1902, for the United States. He returned in November 1902, and his report, which was submitted in March 1903, is under the consideration of the Government of India.

Chamber of Indian railways.—A conference of railway delegates assembled at Calcutta in February 1902, to consider whether—

(*a*) a permanent conference should be established independent of Government, with a paid Secretary and a President elected by the Members, and, if so,

(*b*) what the name, powers and functions of this conference should be; or

(*c*) if they were unable to recommend the establishment of a permanent conference, whether the "Standing Committee" which was created under resolutions Nos. 51 and 3 of the conferences of 1899 and 1900, respectively, should be continued.

The conference recommended the adoption of proposal (*a*), and, as regards (*b*), suggested that the body be called "The Chamber of Indian railways." They also framed rules defining the functions of the proposed "Chamber of Indian railways." These have been referred to the Boards of the several railways and are still under their consideration.

Comforts of lower class passengers.—As stated in the previous report, the Government of India addressed railway administrations regarding the inconvenience and hardships experienced by lower class passengers, on account of the absence of latrine accommodation in carriages. It is recorded with satisfaction that railway administrations are giving the matter their earnest attention, and that satisfactory progress is being made in the provision of the required accommodation.

Ambulance institutions to aid passengers wounded in railway accidents.—During the year, instructions were given by the Madras Railway Company's Medical Officer in the art of rendering first aid to passengers wounded in railway accidents, and 22 employés obtained certificates of the St. John Ambulance Association. Ambulance classes were also established at Negapatam, Cuddalore, Villupuram and Madras by the South Indian Railway Company, and certificates were obtained by 47 employés.

Standardization of locomotives.—Mr. C. W. Hodson, the Director of Railway Construction, was deputed, while in England, by His Majesty's Secretary of State for India to consult the English authorities in regard to—

(*i*) the relaxation of the existing Standard Dimensions for Indian railways, as regards fixed and moving dimensions, and regulations regarding the strength of bridges and the axle loads and weight of rolling-stock; and

(*ii*) the placing of orders for rolling-stock in advance.

Mr. Hodson submitted his report to the Secretary of State and its recommendations are now under the consideration of the Government of India.

Agreements calculated to avoid or terminate rate wars.—An agreement was entered into between the East Indian and Bengal and North-Western Railway Companies for the interchange of traffic on the following general basis:

(*i*) traffic originating on one of the two systems for delivery on or *viâ* that line, to be retained by it and not be competed for by the other system;

(*ii*) traffic originating on one of the two systems, for delivery on or *vid* the other, to be made over by the booking system at the junction giving it the longest lead, the receiving line quoting tariff rates from that junction to destination.

A similar agreement was entered into between the Madras and South Indian Railway Companies on the following general basis:

(*i*) the rates by the shortest route between any two stations to apply to all traffic between those stations, irrespective of the route by which it travelled;

(*ii*) the sending railway to have power to select the route most advantageous to itself within a limit of 33 per cent. in excess of the shortest route mileage.

Contracts for working of lines executed.—On the 27th June 1901, an Indenture was executed for the construction and working by the South Indian Railway Company of the Pamban and Travancore branches.

On the 23rd January 1902, an Indenture was executed for the construction and working by the Bengal-Nagpur Railway Company of the Sini-Howrah, Midnapore-Cuttack, Midnapore-Jherria, Jubbulpore-Gondia and Raipur-Dhamtari extensions, and for the working of the Cuttack-Waltair section of the East Coast State railway.

On the 21st February 1902, an agreement was entered into between the administration of the Oudh and Rohilkhand State railway and the Bengal and North-Western Railway Company for the exercise by the latter of running powers over the Cawnpore-Burhwal, 3′ $3\frac{3}{8}$″ gauge, link of the Oudh and Rohilkhand State railway.

On the 18th March 1902, an agreement was entered into for the working of the West of India Portuguese railway by the Southern Mahratta Railway Company; the arrangement having effect from the 1st July 1902.

On the 25th March and 18th July 1902, Indentures were executed for the construction and working of the Sabarmati-Dholka Branch railway by the Bombay, Baroda and Central India Railway Company.

On the 27th March 1902, an Indenture was executed between the Government of the French Settlements in India and the South Indian Railway Company for the working of the Peralam-Karaikkal railway.

On the 17th May 1902, an agreement was executed for the working of the Cambay State railway, from Tarapur to Cambay, by the Bombay, Baroda and Central India Railway Company.

On the 23rd June 1902, an agreement was entered into between the administration of the Oudh and Rohilkhand State railway and the Great Indian Peninsula Railway Company for the exercise by the latter of running powers over the Cawnpore-Lucknow section of the Oudh and Rohilkhand State railway.

On the 1st August 1902, an agreement was entered into between the South Indian Railway Company and the British India Steam Navigation Company for the through booking between stations on the Railway Company's system and Colombo *vid* Tuticorin, of coaching and goods traffic, excluding parcels, and of passengers, *vid* the same route to London.

On the 26th August 1902, an Indenture was executed for the construction, maintenance and working by the Barsi Light Railway Company of two extensions of that railway, the one from Barsi Junction station to Pandharpur, and the other from Barsi Town station to Tadwalla.

On the 31st December 1902, an Indenture was executed for the maintenance, management and working by the Madras Railway Company of the Washermenpet (Madras)-Vizagapatam section of the East Coast State railway.

General.—On the 1st January 1902, the working of the Parlakimedi Light railway was made over to the Bengal-Nagpur Railway Company by the owning Native Chief.

On the 17th March 1902, the Mariani and Titabar junction stations of the Jorhat State railway were made over to the Assam-Bengal Railway Company for joint working.

Chief events of the year.

From the 10th April 1902, through booking of goods traffic was introduced between the Eastern Bengal State and the Bengal-Nagpur railways *viâ* Dock Junction and the Shalimar wagon ferry.

Consequent on the opening of the Kaunia-Dhubri extension of the Eastern Bengal State railway, the section of the Kaunia-Dharlla, 2′ 6″ gauge, branch from Kurigram to Jatrapur was abandoned from the 23rd September 1902, and through booking with the River Steam Navigation Company's Assam service was introduced *viâ* Dhubri Ghât instead of *viâ* Jatrapur.

On the 14th December 1902, through connection was established between the Kathiawar railways and the Rajputana-Malwa railway system by the conversion of the 5′ 6″ gauge line between Wadhwan and Viramgam to the 3′ $3\frac{3}{8}$″ gauge.

Arrangements were concluded at the close of the year, for the purchase by the State of the property of the Nilgiri Railway Company on 1st January 1903.

Alternative line to the Jherria coal-fields and to Northern India.—In connection with the recommendation of the committee, referred to in the last report, which investigated the question of the entry of the Bengal-Nagpur railway into the Jherria coal-fields and the provision of an independent access to Calcutta from the United Provinces of Agra and Oudh, the following lines were sanctioned for construction:

(*a*) by the East Indian Railway Company—

Manpur (Gya) to Hariharpur,
Katrasgarh to Khanoodih,*
Jherria to Dhanbaid,*
Northern half of the Mulkeera-Katrasgarh cross connection,* and
Tasra siding*; and

(*b*) by the Bengal-Nagpur Railway Company—

Bhojudih to Hariharpur,*
Bhojudih to Parthadihi,*
Bhojudih to Mhoda,*
Bhaga connection,*
Southern half of the Mulkeera-Katrasgarh cross connection,* and
Bhowra siding.*

Madras famine lines.—With the object of increasing the facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to periods of scarcity, sanction was accorded to the construction of feeder lines from Bellary and Hospet on the Southern Mahratta railway to Rayadrug and Kottur, respectively, and from Morrapur and Tirupattur on the Madras railway to Dharmapuri and Krishnagiri, respectively. The agency of the Southern Mahratta Railway Company is to be employed for the construction and working of the two former lines and that of the Madras Railway Company for the two latter lines.

North and South line connecting Ceylon and Upper India.—The Government of India appointed a commission, to sit in Madras in February 1903, chiefly to collect such evidence and information as will enable the commission to advise Government in regard to the general question of the best means of effecting 5′ 6″ gauge connection between the Indian system of 5′ 6″ gauge railways and the Ceylon railways on the same gauge; and also to report on (*a*) the best means for linking Mysore with Southern India; (*b*) the Podanur-Palni (or Dindigul) connection, and (*c*) the suggested conversion to 3′ $3\frac{3}{8}$″ gauge of all the existing lines of railway west of Erode or Podanur.

Branch or feeder line terms.—The questions of the general revision of the terms for the construction, outside the Government of India "Programme," of branch or feeder lines of railway by private enterprise, of the construction of feeder lines by Local District Boards from taxes expressly levied for the purpose, and of the financing of such lines, are under consideration.

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* Sanctioned during 1901.

Important works completed.

Rolling-stock.

Important works completed.

48. The following works of importance were completed during the year 1902:

Bengal and North-Western railway system.—The Kosi bridge near Katihar (15 spans of 200-foot girders) on the Tirhoot section on the 10th July 1902; and the permanent Gogra bridge at Turtipur (18 spans of 200-foot girders) on the Company's section in December.

Bengal-Nagpur railway.—The wagon ferry between Shalimar and Kidderpore on the 10th April 1902; and the doubling of the line between Santragachi and Bauria, 10¼ miles, on the 17th June 1902.

Bombay, Baroda and Central India railway.—The conversion of the line from Viramgam to Wadhwan, 39¼ miles, from the 5′ 6″ to the 3′ 3⅜″ gauge, on the 14th December 1902.

Eastern Bengal State railway.—The Dharlla bridge at Mogalhat (10 spans of 150-foot girders) on the 2nd January 1902.

East Indian railway.—The Amanat bridge on the Daltonganj extension (7 spans of 100-foot girders) on the 15th December 1902; the provision of additional crossing stations to allow of trains throughout the main line and the Jubbulpore branch being worked on the "Absolute Block System"; the triplication of the line between Boinchee and Debipur, 2·20 miles, on the 30th November 1902; and the doubling of the line between Ghaziabad and Shahdara, 2·10 miles, on the 1st July 1902.

Great Indian Peninsula railway system.—The extension of the gas works at Victoria Terminus; and the building of the new station at Itarsi.

North Western railway.—The Kabul bridge at Nowshera (7 spans of 40-foot girders and 4 spans of 150-foot girders) on the 29th October 1902.

Rajputana-Malwa railway.—The removal of the locomotive shed and the transhipment yard at Delhi from their old site in the Central station, to Serai Rohilla, 2¼ miles out.

Southern Punjab railway.—The opening of a new station at Punjabi Serai, near Delhi, on the 20th December 1902.

Bridges and Tunnels. App. 48 and 49.

49. Appendices 48 and 49 contain particulars of some of the important railway bridges and tunnels open for traffic on the 31st December 1902.

Rolling-stock.

Rolling-stock. App. 33, 33A. and 34.

50. During 1901, 223 engines, 563 passenger carriages and 4,695 wagons were added to the rolling-stock of railways; in 1902 a further addition of 205 engines, 684 passenger carriages and 5,023 wagons was made.

The total outlay on rolling-stock amounted at the close of 1902 to Rs. 47,86,60,000, or at the rate of Rs. 18,503 per mile open, as will be seen from Appendix No. 33. The additions under supply to meet further developments of traffic are shown at the foot of the same appendix, and amount to 505 engines, 1,129 passenger vehicles and 10,295 wagons.

Statistics of the work done by the rolling-stock of the principal railways are shown in Appendix 33-A.

Automatic brakes. App. 35.

51. During the year 1902, 228 engines and 766 vehicles were fitted with automatic brakes, making the number so fitted at the close of the same year 2,005 engines and 10,064 vehicles, as against 3,109 engines and 107,947 vehicles not yet fitted.

Carriages lighted by gas. App. 36.

52. During the year 1902, 1,503 vehicles were fitted with Pintsch's gas, making the total number so fitted at the close of the year 8,080, as compared with 7,924 not yet fitted.

Interlocking and block working. App. 37.

53. During the year under review, 71 stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations was more satisfactory this year, 90 stations having been provided with these instruments.

Accidents.

Accidents. App. 38.

54. The following is a statement of accidents to persons which have occurred during the last five years :

Year.	Passengers,						Servants.						Other persons.										Total all classes.	
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		Whilst passing over railways at level crossings.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.		Total.			
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed	Injured.	Killed.	Injured.
1898 .	6	66	63	188	69	254	23	62	174	309	197	371	26	9	428	139	88	8	11	18	553	174	819	799
1899 .	7	86	60	191	67	277	20	92	182	339	202	431	21	10	445	149	103	6	25	23	594	188	863	896
1900 .	14	85	83	258	97	343	21	84	236	384	257	468	32	17	698	236	164	8	17	35	911	296	1,265	1,106
1901 .	3	47	91	251	94	298	14	83	261	375	275	458	41	17	542	170	129	9	33	18	745	214	1,114	970
1902 .	127	184	98	289	225	473	37	95	269	364	306	459	29	16	542	162	108	5	21	26	700	209	1,231	1,141

Train accidents.

55. The following are particulars of the more serious accidents :

Madras railway.

No. 81 mail train on the 12th September 1902 left Mangapatnam, at 3-29 A.M., with 147 passengers, 4 sorters, 2 guards, and 3 enginemen. At mile $\frac{205}{7-8}$ a short distance north of Mangapatnam, there was a skew bridge with three openings of 30 feet on the square. The line to the south of the bridge is on a curve of 19,800 feet radius, and on a falling gradient of 1 in 568. On the night in question there was, in a limited area, a sudden and violent fall of rain such as had never been approached in magnitude during the existence of the railway. The flood rose to the tops of the girders of 11′ 8″ over the river bed, washed away two spans of girders and overturned pier No. 2. The mail train with the exception of the rear brake van was precipitated into the gap, and 75 passengers and 4 railway servants were killed, while 6 passengers were injured. In addition to the destruction caused to the bridge, the line was breached at miles 205$\frac{14}{15}$ and 207·6.

North Western State railway.

No. 19 up mixed train, while entering Khatauli station at 16·54 hours on the 31st July 1902 was derailed at the facing points owing to the flange of the right leading wheel of the engine having worn sharp and to the speed of the train being in excess of the limit. The train was being admitted on to the platform or loop line. The engine buried itself up to its buffer beam in the bank, and the 4 vehicles behind it were completely wrecked. Eighteen passengers were killed and 27, of whom 10 subsequently died, were injured.

East Indian railway.

No. 13 up mixed train left Rampore Haut at 14·58 hours on the 29th June 1902. The train encountered a storm near the down distant signal, and after travelling about a mile in it, 13 of the 15 vehicles which composed the train, were overturned by the force of the wind. Thirteen passengers were killed and 15 were injured. The line was blocked for about 7 hours.

Damages by floods and rainfall.

56. The following are particulars of the more serious damages caused by floods and rainfall:

Bengal and North-Western railway system.

Owing to heavy floods during the months of August and September in the Kosi, Tiljuga and Bagmatti rivers, twelve bridges and about six miles of line on the Eastern and Bairagnia branches of the Tirhoot State railway were damaged. Traffic to the terminal stations was interrupted for about three months.

Bengal Dooars railway.

On the 11th August, the bank at a 40-foot girder bridge near Bagrakote was damaged by a flood and traffic was suspended till the 14th idem.

On the 27th September, an overflow of the Teesta river breached and damaged the embankment at several places in the locality of Bagrakote. Communication was restored to all stations (except Bagrakote) on the 7th October, and to Bagrakote on the 29th November.

Bombay, Baroda and Central India railway system.

On the 5th July, owing to heavy rainfall, the Khandwa section of the Rajputana-Malwa railway was breached in several places, between miles 365 and 384, and caused interruption to traffic. Through communication was restored on the 7th of the month.

Owing to heavy rainfall, the banks on the Vijapur-Kalol section of the Vijapur-Kalol-Kadi railway subsided, and necessitated suspension of traffic from the 3rd to the 7th September.

Burma railways.

On the 3rd July, owing to very heavy rainfall, the bank at mile 403·20 A on the Alon branch was carried away for a length of 36 feet. Through communication was restored on the 5th idem.

Dibru-Sadiya railway.

On the 9th July, an overflow of the Brahmaputra river flooded and breached the Ghat line in several places, and necessitated the closing of the Ghat traffic for three days.

East Indian railway.

On the 9th September, a sudden flood swept over fifty miles of the Loop line from Sainthia to near Barharwa. One girder bridge, of four spans of 28 feet at mile 154$\frac{1}{8}$, was entirely washed away with about 30 feet of bank at each end, and the girder bridge of 2 spans of 28 feet at mile 156$\frac{3}{8}$ was badly damaged. Eight other minor bridges and the banks at certain places were also injured, and a good deal of ballast was washed away. The traffic between the two stations named was suspended for a month, and that to and from stations north of Barharwa was worked round by the Chord line.

Eastern Bengal State railway.

From the 9th to 11th August, owing to an overflow of the Kosi river, the 3′ 3$\frac{3}{8}$″ gauge line on the Kosi branch was breached in several places between Debiganj and Anchara Ghat, and necessitated transhipment. The line was again breached on the 11th September near the Ferriani bridge and a diversion was put in. Through communication was restored by the 15th November.

On the 9th August, owing to a sudden flood in the Balla torrent, the third pier of the Balla bridge on the Cooch Behar railway between Buxa Road and Jainti collapsed. The bridge was finally opened to goods traffic on the 18th September and to passenger traffic on the 12th October; in the interim traffic was transhipped.

On the 27th September, an overflow of the Teesta river flooded the country from Jalpaiguri to Haldibari, breached the 3′ 3$\frac{3}{8}$″ gauge line on the Northern section in several places between Mandalghat and Jalpaiguri and damaged the bridge at mile 163-10. The line was closed for three days till the waters subsided, when transhipment was resorted to. Diversions were put in and through communication restored on the 7th October.

On the 28th September, owing to a heavy flood in the Torsa river, the right approach of the Torsa bridge on the Cooch Behar railway was underscoured and its slope cut away for a length of 200 feet. A diversion was made and traffic working resumed on the 7th October, prior to which date traffic was transhipped.

Damages by floods and rainfall.

Railway staff.

On the 6th November, the embankment at mile 31-6, between Nattore and Madhnagar on the Northern section, suddenly subsided for a length of 76 feet, and interrupted traffic. Diversions were put in and the line restored to traffic on the 25th idem.

Jodhpur-Bikaner railway.

On the 29th August, the line was breached between Balotra and Pachpadra for a length of 800 feet, and traffic was interrupted till the 2nd September.

Madras railway.

On the 16th and 17th July, five washouts occurred between miles 372 and 382-16-13 on the South-West line which caused delay to traffic and necessitated transhipment. The through running of trains was resumed on the 18th idem.

On the 12th September, owing to floods caused by sudden and heavy rainfall and the bursting of the tanks near the line, bridge No. 665, at mile $\frac{205}{7\cdot8}$ north of Mangapatnam station on the North-West line, was destroyed, and the line breached at miles 205-14-15 and 207-6. No. 81 mail of the 11th idem, after passing through Mangapatnam station, was, with the exception of the rear brakevan, precipitated into the gap at mile 205. This accident resulted in considerable damage to property and loss of life, particulars of which will be found in paragraph 55. On the 8th October, heavy floods again occurred at mile 205-7. The line was restored on the 9th idem.

On the 28th and 29th October, a cyclonic storm burst over the Nellore district seriously damaging the works, permanent-way and four bridges on the North-East line between miles 118 and 160. Temporary diversions and bridges were erected, when a second cyclonic storm swept inland from the Bay of Bengal on the 17th and 18th November, and partly destroyed the temporary bridges at miles 134-4-5 and 143-14-15. Through communication was restored on the 26th idem. The diversions were again badly damaged by floods on the 15th December, when breaches occurred at mile 119-9. Traffic was interrupted until the 21st idem, when through communication was restored.

Nilgiri railway.

On the 8th January, several landslips occurred between miles 10 and 15, when a quantity of boulders and earth fell on to the line. Through communication was restored on the 20th idem. Owing to exceptionally heavy rainfall, further damages were done to the line during November and December, and interrupted traffic till the 13th January 1903.

North Western State railway.

On the 13th May, owing to exceptionally heavy rainfall, the line was badly breached in several places between Kurrachee and Kotri. Through communication was restored on the 20th on the single line, double line working was resumed on the 29th of the month. Heavy rainfall and the overflow of sea water also breached the old Kiamari down line between the City and Cantonment stations of Kurrachee, and the up line between Kurrachee Cantonment and Thal. Railway communication between Kurrachee and Kiamari was cut off till the 19th, when traffic was worked on the up line.

Railway staff.

Railway staff. App. 39.

57. The following table shows the number of employés of the different races, European, Eurasian and Native:

Year.	Europeans.	Eurasians.	Natives.	Total.
1898 .	4,967	6,936	296,700	308,603
1899 .	5,292	7,393	329,089	341,774
1900 .	5,229	7,364	337,383	349,976
1901 .	5,493	8,175	353,278	366,946
1902 .	5,875	8,269	378,373	392,517

Railway staff.

58. Of the Europeans and Eurasians, the following number were enrolled as Volunteers : **Volunteer force.** App. 40.

Year.	Sergeant Instructors furnished by the Army.	Enrolled strength of Volunteers.					Total number of European and Eurasian employés on railways.
		Efficients.			Non-efficients.	Total number of employés enrolled as Volunteers.	
		Officers.	Non-Commissioned Officers.	Volunteers.			
1898	116	375	1,362	9,498	270	11,505*	11,903
1899	123	395	1,460	9,958	152	11,965*	12,685
1900	122	389	1,406	10,068	175	12,038*	12,593
1901	120	393	1,345	9,638	300	11,676	13,671
1902	121	380	1,305	9,723	604	12,022	14,144

59. The Police force employed for the maintenance of law and order on railways and for the protection of railway property is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths and the railways paying seven-tenths of the expense incurred. **Police force.** App. 41.

60. There is a Provident Fund, in connection with every railway in India, the object of which is to make some provision for employés against their retirement or for their families in the event of their dying while still in the service of the railway. The money in this fund cannot be attached by courts of law, nor can it be alienated or hypothecated by the employé. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of this fund and is required to subscribe monthly amounts varying on different railways but not exceeding 1-12th of his salary. At the close of the half-year, the railway distributes as bonus among the depositors a first contribution, equal to one-half of such subscriptions, and a second contribution, if the earnings permit of this being done, not exceeding one-half of such subscriptions or one per cent. of net earnings. In the case of the more prosperous railways, the double contribution is now generally obtained by depositors. The amount thus subscribed amounted at the end of 1902 to 413 lakhs of rupees, the bonus paid by railways amounting to over 100 lakhs. **Provident Fund.** App. 39.

61. Fines inflicted on, and bonus contributions to the Provident Fund forfeited by, employés are not credited to the revenues of the railway, but to what is known as the Fine Fund. The amounts thus withheld are shown in Appendix No. 42. On most of the railways the money goes back again to the employés in the shape of contributions to recreation clubs, schools and similar institutions and in the relief of families left in destitute circumstances. **Fine Funds.** App. 42.

62. On the larger railways, schools are provided and maintained at all centres where the number of children is large enough to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government in the Educational Department allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school, and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway. **Schools.** App. 43.

* These figures include non-railway employés enrolled in Railway Corps.

Railway staff.

The number attending school amounted, at the close of 1902, to 5,397 children and 3,983 apprentices and workmen, the contributions by Government amounting to Rs. 31,367; by the railways from revenues Rs. 1,17,035, from the Fine fund Rs. 11,887; and by fees to Rs. 1,30,215.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

SIMLA;

Dated 23rd May, 1903.

A. BRERETON,

Secretary to the Government of India,
Public Works Department,
Railways.

APPENDICES

of

MILEAGE AND CAPITAL OUTLAY

Appendix 1.
List of Railways.

APPENDIX 1.

List of Railways at the close of the Calendar year 1902, alphabetically arranged with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No. Main.	Classification No. Sub.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of railway, in miles, on 31st December 1902, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Lines owned by Native states and worked by agency of: Native state itself.	Lines owned by Native states and worked by agency of: Company.	Lines owned by Native states and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		A.												
11	(a)	Agra-Delhi Chord	Agra-Delhi Chord Ry.	...	5′ 6″	121·16	...	...	...	...	...	...	...	Unopen.
8	(c)	Ahmedabad-Dhólka	Bombay, Baroda and Central India.	...	3′ 3⅜″	...	...	...	33·54	...	...	...	...	Unopen.
8	(i)	Ahmedabad-Parantij	Bombay, Baroda and Central India Ry. Co.	1-5-97	3′ 3⅜″	...	...	...	54·70	...	...	...	...	Open.
7	(c)	Amraoti. . .	Great Indian Peninsula Ry. Co.	16-2-71	5′ 6″	...	5·49*	...	...	...	...	...	...	Open.
14	(a)	Assam-Bengal .	Assam-Bengal Ry. Co..	1-7-95	3′ 3⅜″	...	589·21	...	...	...	...	...	...	Open.
						...	155·24	...	...	...	...	...	...	Unopen.
10	(f)	Azhikal-Mangulore	Madras Ry. Co. . .	...	5′ 6″	...	77·27	...	...	...	...	...	...	Unopen.
		B.												
25	(a)	Barsi Light . .	Barsi Light Ry. Co. .	1-3-97	2′ 6″	...	...	...	21·59	...	...	...	...	Open.
						...	...	...	57·37	...	...	...	...	Unopen.
21	(j)	Bellary-Rayadrug	Southern Mahratta Ry. Co.	...	3′ 3⅜″	...	33·00	...	...	...	...	...	...	Unopen.
16	(a)	Bengal and North-Western (Company's section),	Bengal and North-Western Ry. Co.	2-4-84	3′ 3⅜″	...	...	...	747·35	...	...	...	...	Open.
						...	...	...	102·11	...	...	...	...	Unopen.
3	(a)	Bengal Central .	Bengal Central Ry. Co.	16-10-82	5′ 6″	...	125·01†	...	...	...	...	...	...	Open.
12	(a)	Bengal Dooars .	Bengal Dooars Ry. Co.	15-1-93	3′ 3⅜″	...	...	...	36·40	...	...	...	...	Open.
12	(b)	Bengal Dooars Extensions.	Bengal Dooars Ry. Co.	20-4-00	3′ 3⅜″	...	...	...	77·76	...	...	...	...	Open.
						...	...	...	38·80	...	...	...	...	Unopen.
4	(a)	Bengal-Nagpur .	Bengal-Nagpur Ry. Co.	2-11-86	5′ 6″	...	1,546·00	...	...	...	...	...	...	Open.
						...	176·90	...	...	...	...	...	...	Unopen.
9	(b)	Bezwada Extension	Nizam's Guaranteed State Rys. Co.	10-2-89	5′ 6″	...	20·58	...	...	...	...	...	...	Open.
20	(a)	Bhavnagar-Gondal-Junagad-Porbandar.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	20-12-80	3′ 3⅜″	...	...	...	...	334·19	...	...	...	Open.
7	(g)	Bhopal-Itarsi (British section).	Great Indian Peninsula Ry. Co.	1-6-82	5′ 6″	...	18·11	...	...	...	...	...	...	Open.
		Bhopal-Itarsi (Native State section).				...	...	...	...	...	44·28	...	...	Open.
7	(f)	Bhopal-Ujjain .	Great Indian Peninsula Ry. Co	11-11-95	5′ 6″	...	...	...	...	...	113·27	...	...	Open.
18	(b)	Bikaner . . .	Jodhpur-Bikaner Ry. .	9-12-91	3′ 3⅜″	...	...	...	...	245·35	...	...	...	Open.
7	(e)	Bina-Goona-Baran	Great Indian Peninsula Ry. Co	23-9-95	5′ 6″	...	...	...	...	...	145·63	...	...	Open.
21	(e)	Birur-Shimoga .	Southern Mahratta Ry. Co.	1-12-99	3′ 3⅜″	...	...	...	...	...	37·92	...	...	Open.
8	(a)	Bombay, Baroda and Central India.‡	Bombay, Baroda and Central India Ry. Co.	10-2-60	5′ 6″	...	...	460·68§	...	...	...	...	...	Open.
						...	...	44·00	...	...	...	...	...	Unopen.
2	(c)	Brahmaputra-Sultanpur ‖	Eastern Bengal State Ry.	1-4-99	3′ 3⅜″	...	...	59·37	...	...	...	...	...	Open.
36	(a)	Bukhtiarpur-Behar	Bukhtiarpur-Behar Light Ry. Co.	...	2′ 6″	...	...	...	18·75	...	...	...	...	Unopen.
23	(a)	Burma . . .	Burma Railways Co. .	2-5-77	3′ 3⅜″	...	1,260·50	...	...	...	...	...	...	Open.
						...	76·94	...	...	...	...	...	...	Unopen.
		C.												
5	(c)	Cawnpore-Burhwal (metre gauge link)	Oudh and Rohilkhand State Ry.	24-11-96	3′ 3⅜″	79·60	...	...	...	...	...	...	...	Open.
2	(e)	Cooch Behar .	Eastern Bengal State Ry.	15-9-93	2′ 6″	...	...	...	...	...	...	33·60	...	Open.
		D.												
6	(h)	Dandot . .	North Western State Ry.	5-7-89	2′ 0″	6·18	...	...	...	...	...	...	...	Open.
29	(a)	Darjeeling-Himalayan.	Darjeeling-Himalayan Ry. Co.	23-8-80	2′ 9″	...	...	...	51·60	...	...	...	...	Open.
1	(b)	Delhi-Umballa-Kalka.	East Indian Ry. Co. .	1-3-91	5′ 6″	...	...	...	162·24	...	...	...	...	Open.
15	(a)	Deoghur . .	Deoghur Ry. Co. .	23-12-82	3′ 3⅜″	...	...	...	4·79	...	...	...	...	Open.
				Carried over .		85·78	3,559·90	520·05	1,156·23	579·54	341·10	33·60	...	Open.
						121·16	519·35	44·00	250·57	...	...	...	...	Unopen.

* Classed as a State railway in consequence of the lease in perpetuity of the Assigned Districts of the Berars to the British Government with effect from the 1st October 1902.
† Although for convenience classed amongst State lines, this line is the property of the Bengal Central Railway Company.
‡ Guaranteed under terms of old contracts.
§ Includes the Viramgam-Wadhwan section converted from the 5′ 6″ gauge to the 3′ 3⅜″ gauge on the 14th December 1902.
‖ Guaranteed under terms of modern contracts.

APPENDIX 1—*contd.*

List of Railways at the close of the Calendar year 1902, alphabetically arranged with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4
For mileage under construction or sanctioned, see Appendix 5

Classification No. Main.	Classification No. Sub.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, on 31st December 1902, under several heads of classification.								Remarks.
						State lines worked by agency of		Guaranteed railway.	Assisted railway	Lines owned by Native states and worked by agency of			Lines in foreign territory.	
						State railway.	Company.			Native state itself.	Company.	State railway.		
				Brought forward		85·78	3,559·90	520·05	1,156·25	579·54	341·10	33·60	...	Open.
						121·16	519·35	44·00	259·37	...	...	...	...	Unopen.
		D.—*concld.*												
20	(d)	Dhrangadra	Bhavnagar-Gondal-Junagad-Porbandar Ry.	1-6-98	3′ 3⅜″	...	...	...	...	20·83	...	...	...	Open.
13	(a)	Dibru-Sadiya	Assam Railways and Trading Co.	8-82	3′ 3⅜″	...	...	...	77·50	...	...	...	...	Open.
35	(a)	Dwara Therria	Dwara-Therria Light Ry. Co.	...	2′ 6″	...	...	...	19·50	...	...	...	...	Unopen.
		E.												
2	(a)	Eastern Bengal State—Southern and Eastern sections.	Eastern Bengal State Ry.	2-1-62	5′ 6″	277·02	...	...	...	...	...	...	...	Open.
						31·91	...	...	...	...	...	...	...	Unopen.
2	(b)	Northern and Behar sections.		28-8-77	3′ 3⅜″	500·46	...	...	...	...	...	...	...	Open.
						151·62	...	...	...	...	...	...	...	Unopen.
		Kaunia-Dharlla branch and Santrabari extension.		18-7-81	2′ 6″	34·78	...	...	...	...	...	...	...	Open.
		Dacca section		4-1-85	3′ 3⅜″	85·92	...	...	...	...	...	...	...	Open.
1	(a)	East Indian	East Indian Ry. Co.	15-8-54	5′ 6″	...	1,923·35	...	...	...	...	...	...	Open.
						...	179·62	...	...	...	...	...	...	Unopen.
		G.												
8	(l)	Gaekwar's Dabhoi	Bombay, Baroda and Central India Ry. Co.	8-4-73	2′ 6″	...	...	...	...	...	78·80	...	...	Open.
						...	...	...	...	...	9·20	...	...	Unopen.
8	(h)	Gaekwar's Mehsana		21-3-87	3′ 3⅜″	...	...	...	...	...	92·68	...	...	Open.
8	(f)	Godhra-Rutlam-Nagda.		16-1-98	5′ 6″	...	141·14	...	...	...	...	...	...	Open.
7	(a)	Great Indian Peninsula.	Great Indian Peninsula Ry. Co.	18-4-53	5′ 6″	...	1,548·17	...	...	...	...	...	...	Open.
21	(c)	Guntakal-Mysore frontier.	Southern Mahratta Ry. Co.	1-3-92	3′ 3⅜″	...	119·50	...	...	...	...	...	...	Open.
7	(h)	Gwalior Light	Great Indian Peninsula Ry. Co.	2-12-99	2′ 0″	...	...	...	...	...	126·14	...	...	Open.
						...	...	...	...	...	57·86	...	...	Unopen.
		H.												
5	(b)	Hardwar-Dehra*	Oudh and Rohilkhand State Ry.	1-3-00	5′ 6″	...	...	32·04	...	...	...	...	...	Open
21	(d)	Hindupur (Yesvantpur-Mysore frontier).	Southern Mahratta Ry. Co.	15-12-92	3′ 3⅜″	...	...	...	...	...	51·35	...	...	Open.
21	(j)	Hospet-Kottur	Southern Mahratta Ry. Co.	...	3′ 3⅜″	...	38·10	...	...	...	...	...	...	Unopen.
30	(a)	Howrah-Amta	Howrah-Amta Ry. Co.	1-7-97	2′ 0″	...	...	...	28·69	...	...	...	...	Open.
						...	...	...	21·00	...	...	...	...	Unopen.
31	(a)	Howrah-Sheakhala	Howrah-Sheakhala Ry. Co.	2-8-97	2′ 0″	...	...	...	19·75	...	...	...	...	Open.
9	(c)	Hyderabad-Godavari Valley.	Nizam's Guaranteed State Rys. Co.	21-10-99	3′ 3⅜″	...	...	...	...	...	391·42	...	...	Open.
		I.												
7	(d)	Indian Midland	Great Indian Peninsula Ry. Co.	10-1-78	5′ 6″	...	796·53	...	...	...	...	...	...	Open.
						...	8·85	...	...	...	...	...	...	Unopen.
				Carried over		983·96	3,088·59	552·09	1,252·17	600·37	1,081·44	33·60	...	Open.
						357·69	745·92	44·00	291·07	...	67·06	...	...	Unopen.

* Guaranteed under terms of modern contracts.

P. T. O.

Appendix I.
List of Railways.

APPENDIX I—*contd.*

List of Railways at the close of the Calendar year 1902, alphabetically arranged with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No. Main.	Sub.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, on 31st December 1902, under several heads of classification.							Remarks.
						State lines worked by agency of		Guaranteed railway.	Assisted railway.	Lines owned by Native states and worked by agency of			Lines in foreign territory.	
						State railway.	Company.			Native state itself.	Company.	State railway.		
				Brought forward		983·96	3,088·52	552·09	4,282·17	609·37	1,081·44	33·60	...	Open.
						357·63	745·92	44·60	291·07	...	67·96	...	...	Unopen.
		J.												
8	(n)	Jaipur (Siwai Madhopur).	Bombay, Baroda and Central India.	...	3′ 3½″	...	...	...	...	...	72·85	...	...	Unopen.
6	(d)	Jammu and Kashmir (Native state section).	North Western State Ry.	15-3-90	5′ 6″	...	...	...	...	...	...	15·92	...	Open.
20	(b)	Jamnagar . .	Bhavnagar-Gondal-Junagad-Porbandar Ry.	8-4-97	3′ 3½″	...	...	...	...	54·22	...	...	...	Open.
20	(c)	Jetalsar-Rajkot .		12-4-93	3′ 3½″	...	...	...	...	46·21	...	...	...	Open.
18	(a)	Jodhpur . .	Jodhpur-Bikaner Ry. .	24-6-82	3′ 3½″	...	...	...	...	454·94	...	...	...	Open.
18	(c)	Jodhpur-Hyderabad (British section).	Jodhpur-Bikaner Ry. .	13-8-92	3′ 3½″	...	123·98	...	...	...	...	...	...	Open.
32	(a)	Jorhat . .	Jorhat State Ry. . .	15-12-84	2′ 0″	30·00	...	...	...	...	...	...	...	Open.
4	(d)	Jubbulpore-Gondia extension.	Bengal-Nagpur Ry. Co.	...	2′ 6″	...	252·67	...	...	...	...	...	...	Unopen.
		K.												
34	(a)	Kalka-Simla . .	Delhi-Umballa-Kalka Ry. Co.	...	2′ 6″	...	...	...	60·00	...	...	...	...	Unopen.
22	(d)	Karaikkal-Peralam	South Indian Ry. Co. .	14-3-98	3′ 3⅜″	...	...	...	...	...	...	...	14·65	Open.
7	(b)	Khamgaon . .	Great Indian Peninsula Ry. Co.	4-3-70	5′ 6″	...	7·97	...	...	...	...	...	...	Open.
6	(f)	Khusalgarh-Kohat Tmi.	North Western State Ry.	25-5-02	2′ 6″	29·70	...	...	...	...	...	...	...	Open.
						62·03	...	...	...	...	...	...	...	Unopen.
10	(c)	Kolar Gold-fields .	Madras Ry. Co. . .	1-6-94	5′ 6″	...	...	...	...	...	9·88	...	...	Open.
21	(f)	Kolhapur . .	Southern Mahratta Ry. Co.	24-4-91	3′ 3⅜″	...	...	...	...	...	29·27	...	...	Open.
		L.												
13	(b)	Ledo and Tikak-Margherita Colliery.	Assam Railways and Trading Co.	17-2-84	3′ 3½″	...	...	...	11·00	...	...	...	...	Open.
17	(b)	Lucknow-Bareilly .	Rohilkund and Kumaon Ry. Co.	12-10-84	3′ 3½″	...	231·17	...	...	...	...	...	...	Open.
						...	5·93	...	...	...	...	...	...	Unopen.
6	(e)	Ludhiana-Dhuri-Jakhal.	North Western State Ry.	10-4-01	5′ 6″	...	...	...	...	...	...	78·66	...	Open.
		M.												
10	(a)	Madras† . .	Madras Ry. Co. . .	1-7-56	5′ 6″	...	...	888·10	...	...	...	...	...	Open.
						...	...	17·07	...	...	...	...	...	Unopen.
10	(b)	Madras (North-East line).	Madras Ry. Co. . .	20-2-93	5′ 6″	...	497·19	...	...	...	...	...	...	Open.
						...	0·93	...	...	...	...	...	...	Unopen.
37	(a)	Madura District .	Madura District Light Ry. Co.	...	2′ 6″	...	...	...	93·00	...	...	...	...	Unopen.
4	(e)	Moharbhanj . .	Bengal-Nagpur Ry. Co.‡	...	2′ 6″	...	...	...	...	...	28·50	...	...	Unopen.
10	(g)	Morappur-Dharmapuri.	Madras Ry. Co. . .	...	2′ 6″	...	18·37	...	...	...	...	...	...	Unopen.
24	(a)	Morvi . . .	Morvi Ry. . . .	11-3-86	2′ 6″	...	...	...	...	94·36	...	...	...	Open.
2	(d)	Mymensingh-Jamalpur Jagannathganj.	Eastern Bengal State Ry.	15-10-98	3′ 3½″	...	...	...	53·14	...	...	...	...	Open.
21	(g)	Mysore-Nanjangud	Southern Mahratta Ry. Co.	1-12-91	3′ 3½″	...	...	...	...	...	15·80	...	...	Open.
21	(b)	Mysore section (Southern Mahratta).	Southern Mahratta Ry. Co.	1-2-81	3′ 3½″	...	296·22	...	...	...	...	...	...	Open.
		N.												
8	(c)	Nagda-Ujjain .	Bombay, Baroda and Central India Ry. Co.	15-7-96	5′ 6″	...	...	...	...	...	34·32	...	...	Open.
10	(e)	Nilgiri . . .	Madras Ry Co. . .	15-6-99	3′ 3½″	...	...	...	16·90	...	...	...	...	Open.
9	(a)	Nizam's Guaranteed State.	Nizam's Guaranteed State Ry. Co.	9-10-74	5′ 6″	...	...	...	...	...	330·18	...	...	Open.
14	(b)	Noakhali (Bengal).	Assam-Bengal Ry. Co. .	...	3′ 3½″	...	...	...	34·95	...	...	...	...	Unopen.
6	(a)	North Western State	North Western State Ry.	13-5-61	5′ 6″	3,077·50	...	...	...	...	...	...	...	Open.
						133·90	...	...	...	...	...	...	...	Unopen.
6	(g)	Nowshera-Durgai .	North Western State Ry.	1-1-01	2′ 6″	40·25	...	...	...	...	...	...	...	Open.
		O.												
5	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State Ry.	23-4-67	5′ 6″	1,039·64	...	...	...	...	...	...	...	Open.
						109·14	...	...	...	...	...	...	...	Unopen.
				Carried over		5,201·05	9,245·12	1,446·19	1,363·21	1,250·10	1,500·84	128·18	14·65	Open.
						662·76	1,023·82	61·07	479·02	...	168·41	...	...	Unopen.

* Classed as a State railway in consequence of the lease in perpetuity of the Assigned District of the Berars to the British Government, with effect from the 1st October 1902.
† Guaranteed under terms of old contracts.
‡ Question of working agency not yet finally settled.

APPENDIX I—*concld.*

List of Railways at the close of the Calendar year 1902, alphabetically arranged with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N. B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No. Main.	Sub.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1902 under several heads of classification.							Remarks.
						State lines worked by agency of		Guaranteed railway.	Assisted railway.	Lines owned by Native states and worked by agency of			Lines in foreign territory.	
						State railway.	Company.			Native state itself.	Company.	State railway.		
				Brought forward		5,201·05	9,245·12	1,440·19	1,363·21	1,250·10	1,500·84	128·18	14·65	Open.
						662·76	1,023·82	61·07	479·02	...	168·41	...	...	Unopen.
		P.												
8	(k)	Palanpur Deesa	Bombay, Baroda and Central India Ry. Co.	8-11-98	3′ 3⅜″	...	17·28	...	...	...	...	...	...	Open.
4	(c)	Parlakimedi Light	Bengal-Nagpur Ry. Co.	22-4-01	2′ 6″	...	...	...	...	...	24·68	...	...	Open.
8	(d)	Petlad-Cambay (Anand-Tarapur section).	Bombay, Baroda and Central India Ry. Co.	5-5-90	5′ 6″	...	...	...	...	...	21·50	...	...	Open.
8	(e)	Petlad-Cambay (Tarapur-Cambay section).	Bombay, Baroda and Central India Ry. Co.	20-6-01	5′ 6″	...	...	...	...	...	10·92	...	...	Open.
22	(e)	Pondicherry	South Indian Ry. Co.	15-12-79	3′ 3⅜″	...	...	...	...	...	...	...	7·85	Open.
17	(c)	Powayan Light	Rohilkund and Kumaon Ry. Co.	17-6-90	2′ 6″	...	...	...	39·50	...	...	...	...	Open.
		R.												
4	(b)	Raipur-Dhamtari	Bengal-Nagpur Ry. Co.	10-9-00	2′ 6″	...	6·24	...	...	...	...	...	...	Open.
8	(m)	Rajpipla	Bombay, Baroda and Central India Ry. Co.	1-7-97	2′ 6″	...	...	...	...	...	37·37	...	...	Open.
6	(c)	Rajpura-Bhatinda	North Western State Ry.	1-11-84	5′ 6″	...	...	...	...	...	...	107·05	...	Open.
8	(g)	Rajputana-Malwa	Bombay, Baroda and Central India Ry. Co.	14-2-73	3′ 3⅜″	...	1,648·36	...	...	...	...	...	...	Open.
						...	133·32	...	...	...	...	...	...	Unopen.
27	(a)	Ranaghat-Krishnagar.	Ranaghat-Krishnagar Light Ry. Co.	5-4-99	2′ 6″	...	...	...	26·25	...	...	...	...	Open.
1	(e)	Rewah	East Indian Ry. Co.	...	2′ 6″	...	...	...	...	...	31·81	...	...	Unopen.
17	(a)	Rohilkund and Kumaon.	Rohilkund and Kumaon Ry. Co.	12-10-84	3′ 3⅜″	...	...	...	53·92	...	...	...	...	Open.
		S.												
16	(c)	Sagauli-Raxaul	Bengal and North-Western Ry. Co.	1-3-99	3′ 3⅜″	...	...	...	18·09	...	...	...	...	Open.
35	(a)	Shahdara-Saharanpur.	Shahdara-Saharanpur Light Ry. Co.	...	2′ 6″	...	...	...	135·00	...	...	...	...	Unopen.
10	(d)	Shoranur-Cochin	Madras Ry. Co.	2-6-02	3′ 3⅜″	...	...	...	...	...	64·75	...	...	Open.
1	(c)	South Behar	East Indian Ry. Co.	5-7-99	5′ 6″	...	...	...	78·76	...	...	...	...	Open.
22	(a)	South Indian	South Indian Ry. Co.	15-7-61	3′ 3⅜″	...	1,123·13	...	...	...	...	...	...	Open.
						...	17·33	...	...	...	...	...	...	Unopen.
21	(a)	Southern Mahratta	Southern Mahratta Ry. Co.	24-3-84	3′ 3⅜″	...	1,042·04	...	...	...	...	...	...	Open.
6	(b)	Southern Punjab	North Western State Ry.	10-11-97	5′ 6″	...	...	...	424·72	...	...	...	...	Open.
		T.												
22	(b)	Tanjore District Board (Mayavaram-Mutupet).	South Indian Ry. Co.	2-4-94	3′ 3⅜″	...	...	...	71·11	...	...	...	...	Open.
						...	...	...	33·63	...	...	...	...	Unopen.
8	(b)	Tapti Valley	Bombay, Baroda and Central India Ry. Co.	1-12-98	5′ 6″	...	...	...	155·48	...	...	...	...	Open.
26	(a)	Tarakeshwar-Magra	Bengal Provincial Ry. Co.	7-11-94	2′ 6″	...	...	...	31·12	...	...	...	...	Open.
1	(d)	Tarkessur	East Indian Ry. Co.	1-1-85	5′ 6″	...	...	...	22·23	...	...	...	...	Open.
28	(a)	Tezpur-Balipara	Tezpur-Balipara Ry. Co.	9-8-94	2′ 6″	...	...	...	20·10	...	...	...	...	Open.
33	(a)	Thaton-Duyinzaik	Thaton-Duyinzaik Ry. Co.	11-2-85	2′ 6″	...	...	...	7·76	...	...	...	...	Open.
22	(c)	Tinnevelley-Quilon (Travancore) (British Section).	South Indian Ry. Co.	1-6-02	3′ 3⅜″	...	19·05	...	...	...	...	...	...	Open.
						...	31·33	...	...	...	...	...	...	Unopen.
22	(f)	Tinnevelley-Quilon (Travancore) (Native State section).	South Indian Ry. Co.	...	3′ 3⅜″	...	...	...	...	...	57·95	...	...	Unopen.
16	(b)	Tirhoot	Bengal and North-Western Ry. Co.	1-11-75	3′ 3⅜″	...	536·89	...	...	...	...	...	...	Open.
						...	30·47	...	...	...	...	...	...	Unopen.
10	(h)	Tirupattur-Krishnagiri.	Madras Ry. Co.	...	2′ 6″	...	26·46	...	...	...	...	...	...	Unopen.
		U.												
19	(a)	Udaipur-Chitor	Udaipur-Chitor Ry.	1-8-95	3′ 3⅜″	...	...	...	...	67·39	...	...	...	Open.
		V												
8	(j)	Vijapur-Kalol-Kadi.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3′ 3⅜″	...	...	...	...	...	29·44	...	...	Open.
						...	...	...	...	...	12·20	...	...	Unopen.
		W.												
21	(h)	West of India Portuguese.	Southern Mahratta Ry. Co.	17-1-87	3′ 3⅜″	...	...	...	...	...	...	...	52·11	Open.
		Total railway mileage in India and Burma on the 31st December 1902.				5,201·05	13,668·11	1,440·19	2,306·25	1,317·40	1,689·50	235·23	73·61	Open.
						662·76	1,262·78	61·07	637·90	...	270·37	...	...	Unopen.

Appendix 2.
Railway systems.

APPENDIX 2.

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration by which worked.	Name of railway.	Length of line open on 31st December 1902.				Total of each gauge under the administration.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	
1	(a)	East Indian (E. I.)	East Indian	*1,928·35	...	...	...					
	(b)		Delhi-Umballa-Kalka	162·24	...	...	...					
	(c)		South-Behar	78·76	...	...	...					
	(d)		Tarkessur	22·23	...	...	...	2,186·58	...	...	...	2,186·58
2	(a)	Eastern Bengal State (E. B. S.)	Eastern Bengal State	†277·02	...	...	...					
	(b)		Eastern Bengal State	...	586·38	34·78	...					
	(c)		Brahmaputra-Sultanpur	...	59·37	...	...					
	(d)		Mymensingh-Jamalpur-Jagannathganj.	...	53·14	...	...					
	(e)		Cooch Behar (C. B.)	...	...	33·60	...	277·02	698·89	68·38	...	1,044·29
3	(a)	Bengal Central (B. C.)	Bengal Central	125·01	...	...	...	125·01	...	...	...	125·01
4	(a)	Bengal-Nagpur (B. N.)	Bengal-Nagpur	‡1,546·00	...	...	...					
	(b)		Raipur-Dhamtari (R. D.)	...	...	56·24	...					
	(c)		Parlakimedi Light (P. L. L.)	...	...	24·68	...	1,546·00	...	80·92	...	1,626·92
5	(a)	Oudh and Rohilkhand State (O. & R.)	Oudh and Rohilkhand State	§1,037·83	‖1·81	...	...					
	(b)		Hardwar-Dehra	32·04	...	...	...					
	(c)		Cawnpore-Burhwal (metre gauge link).	...	¶79·60	...	...	1,069·87	81·41	...	...	1,151·28
6	(a)	North Western State (N. W.)	North Western State	**†† 8,077·50	...	...	...					
	(b)		Southern Punjab	424·72	...	...	..					
	(c)		Rajpura-Bhatinda	107·05	...	...	...					
	(d)		Jammu and Kashmir (Native state section).	15·92	...	...	...					
	(e)		Ludhiana-Dhuri-Jakhal	28·66	...	...	...					
	(f)		Khushalgarh-Kohat-Thal (K. K. T.)	...	...	29·70	...					
	(g)		Nowshera-Durgai (N. D.)	...	...	40·25	...					
	(h)		Dandot	...	...	...	6·18	3,703·85	...	69·95	6·18	3,779·98
			Carried over					8,908·33	780·30	219·25	6·18	9,914·06

* From Howrah to Moghal Sarai, 470·02 miles, Sitarampur to Barakar, 9·76 miles, Ghaziabad to the east side of the Jumna bridge near Delhi, 10·70 miles, and the Hooghly bridge branch, 4·22 miles, are laid with double track.
† From Calcutta to Poradaha, 102·47 miles, Canal Junction to Chitpore, 1·88 miles, and Calcutta (Sealdah) to Dock Junction, 7·86 miles, are laid with double track.
‡ From Howrah to Bauria, 13·11 miles, and Simachellam to Waltair, 4·24 miles, are laid with double track.
§ Including 16·79 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge from Burhwal to Barabanki and 0·59 mile on Cawnpore bridge.
‖ Metre gauge connection between the Oudh and Rohilkhand Cantonment and the Bengal and North-Western railway City station, at Benares.
¶ Excluding 3·66 miles, Aishbagh to Daliganj, of the Lucknow-Bareilly railway but including 16·79 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge from Burhwal to Barabanki and 0·59 mile on Cawnpore bridge.
** Including 5·63 miles military lines not used for public traffic and 26·28 miles of mixed (5′ 6″ and 5′ 3⅜″) gauge mileage between Bhatinda and Kot Kapura.
†† From Kiamari to Kotri, 108·00 miles, Mean Meer East to Mean Meer West, 2·13 miles, Gulistan to Chaman, 36·82 miles, and Ab-i-Gum to Kolpur, 23·54 miles, are laid with double track.

APPENDIX 2—*contd.*

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration by which worked.	Name of railway.	Length of line open on 31st December 1902.				Total of each gauge under the administration.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	
			Brought forward					8,908·33	780·80	219·25	6·18	9,914·96
7	(a)	Great Indian Peninsula (G. I. P.)	Great Indian Peninsula	*1,548·17	...	...	...					
	(b)		Khamgaon	7·97	...	...	...					
	(c)		Amraoti	5·49	...	...	...					
	(d)		Indian Midland (I. M.)	796·53	...	...	...					
	(e)		Bina-Goona-Baran	145·63	...	...	...					
	(f)		Bhopal-Ujjain	113·27	...	...	...					
	(g)		Bhopal-Itarsi	57·39	...	...	...					
	(h)		Gwalior Light (G. L.)	...	...	...	126·14	2,674·45	...	...	126·14	2,800·59
8	(a)	Bombay, Baroda and Central India (B., B. & C. I.)	Bombay, Baroda and Central India.	†421·45	‡39·23	...	...					
	(b)		Tapti Valley	155·48	...	...	...					
	(c)		Nagda-Ujjain	34·32	...	...	...					
	(d)		Petlad-Cambay (Anand-Tarapur section).	21·50	...	...	...					
	(e)		Petlad-Cambay (Tarapur-Cambay section).	10·92	...	...	...					
	(f)		Godhra-Ratlam-Nagda	141·14	...	...	...					
	(g)		Rajputana-Malwa (R. M.)	§5·17	1,643·19	...	...					
	(h)		Gaekwar's Mehsana	...	92·63	...	...					
	(i)		Ahmedabad-Parantij	...	54·70	...	...					
	(j)		Vijapur-Kalol-Kadi	...	29·44	...	...					
	(k)		Palanpur-Deesa	...	17·28	...	...					
	(l)		Gaekwar's Dabhoi (G. D.)	...	...	78·80	...					
	(m)		Rajpipla (R.)	...	...	87·37	...	789·98	1,876·47	116·17	...	2,782·62
9	(a)	H. H. Nizam's Guaranteed State (N. G. S.)	H. H. Nizam's Guaranteed State.	330·13	...	...	...					
	(b)		Bezwada Extension	20·58	...	...	...					
	(c)		Hyderabad-Godavari Valley (H. G. V.)	...	391·42	...	...	350·71	391·42	...	...	742·13
10	(a)	Madras (M.)	Madras	**383·10	...	...	...					
	(b)		Madras (North-East line)	††496·88	‡‡0·31	...	...					
	(c)		Kolar Gold-fields	9·88	...	...	...					
			Shoranur-Cochin (S. C.)	...	64·75	...	...					
	(d)		Nilgiri (N.)	...	16·90	...	...	1,393·66	81·96	...	...	1,476·82
12	(a)	Bengal-Dooars (B. D.)	Bengal-Dooars	...	36·40	...	...					
	(b)		Bengal-Dooars Extensions	...	77·76	...	...	...	114·16	...	...	114·16
13	(a)	Dibru-Sadiya (D. S.)	Dibru-Sadiya	...	77·50	...	...					
	(b)		Ledo and Tikak-Margherita Colliery.	...	11·00	...	...	...	88·50	...	...	88·50
			Carried over					14,118·33	3,332·31	335·42	132·32	17,918·88

* From Bombay (Victoria terminus) to Khandwa, 352·39 miles, Bagra tunnel to Towa viaduct, 0·74 mile, Kalyan to Lonavla, 46·42 miles, and Bhusaval to Shegaon, 62·37 miles, are laid with double track.

† From Bombay (Colaba) to Anklesvar, 197·68 miles, Broach to Baroda, 44·01 miles, and Barejadi to Ahmedabad, 10·21 miles, are laid with double track.

‡ Viramgam-Wadhwan section converted from the 5′ 6″ gauge to the 3′ 3⅜″ gauge on 14th December 1902.

§ Standard (5′ 6″) gauge lines between Jumna East bank and Agra Cantonment (3·07 miles) and 2·10 miles of the extension to Ujjain City.

‖ Including 26·28 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge mileage between Bhatinda and Kot Kapura.

¶ From Agra Fort to Agra Cantonment, 1·14 miles and 1·78 miles near Delhi, are laid with double track.

** From Madras to Arkonam, 42·41 miles, and Washermenpet to Veyasarpandy, 1·02 miles, are laid with double track.

†† Including 2·66 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge mileage between Bezwada and Kistna block hut and 0·46 miles (from North facing points to North distant signal at Waltair) laid with double track.

‡‡ Metre (3′ 3⅜″) gauge between Kistna block hut and Tadepalli.

P. T. O.

Appendix 2.
Railway systems.

APPENDIX 2—*contd.*

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration by which worked.	Name of railway.	Length of line open on 31st December 1902.				Total of each gauge under the administration.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5′ 6″	3′ 3¾″	2′ 6″	2′ 0″	5′ 6″	3′ 3¾″	2′ 6″	2′ 0″	
			Brought forward					14,118·33	3,332·31	335·42	132·32	17,918·38
14	(a)	Assam-Bengal (A. B.)	Assam-Bengal	...	589·21	...	...	...	589·21	...	...	589·21
15	(a)	Deoghur (D.)	Deoghur	...	4·79	...	...	...	4·79	...	...	4·79
16	(a)	Bengal and North-Western (B. & N. W.)	Bengal and North-Western	...	742·75	...	...					
	(b)		Tirhoot	...	516·99	...	...					
	(c)		Saganli-Baraul	...	18·09	...	...	...	1,282·73	...	...	1,282·73
17	(a)	Rohilkund and Kumaon (R. & K.)	Rohilkund and Kumaon	...	53·92	...	...					
	(b)		Lucknow-Bareilly	...	231·17	...	...					
	(c)		Powayan Light (P. W. L.)	...	...	39·50	...	...	285·09	39·50	...	324·59
18	(a)	Jodhpur-Bikaner (J. B.)	Jodhpur	...	454·94	...	...					
	(b)		Bikaner	...	245·35	...	...					
	(c)		Jodhpur-Hyderabad (British section).	...	123·98	...	...	...	824·27	...	...	824·27
19	(a)	Udaipur-Chitor (U. C.)	Udaipur-Chitor	...	67·30	...	...	...	67·30	...	...	67·30
20	(a)	Bhavnagar-Gondal-Junagad-Porbandar (B. G. J. P.)	Bhavnagar-Gondal-Junagad-Porbandar.	...	334·19	...	...					
	(b)		Jamnagar	...	51·22	...	...					
	(c)		Jetalsar-Rajkot	...	46·21	...	...					
	(d)		Dhrangadra	...	20·83	...	...	...	455·45	...	...	455·45
21	(a)	Southern Mahratta (S. M.)	Southern Mahratta	...	1,042·04	...	...					
	(b)		Mysore section (Southern Mahratta).	...	296·22	...	...					
	(c)		Guntakul-Mysore frontier	...	119·50	...	...					
	(d)		Hindupur (Yesvantpur-Mysore frontier).	...	51·35	...	...					
	(e)		Birur-Shimoga	...	37·92	...	...					
	(f)		Kolhapur	...	29·27	...	...					
	(g)		Mysore-Nanjangud	...	15·80	...	...					
	(h)		West of India Portuguese	...	51·11	...	...	...	1,643·21	...	...	1,643·21
			Carried over					14,118·33	8,484·86	374·92	132·32	23,110·43

* Including 5·23 miles of dock estate and quarry lines.

† Including 3·93 miles of dock estate lines.

APPENDIX 2—*concld.*

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration by which worked.	Name of railway.	Length of line open on 31st December 1902.				Total of each gauge under the administration.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	
			Brought forward .					14,118·33	8,484·86	374·92	182·32	23,110·43
22	(a)		South Indian . . .	...	1,123·13	...	...	...				
	(b)		Tanjore District Board (Mayavaram-Mutupet).	...	71·11	...	...	...				
	(c)	South Indian (S. I.)	Tinnevelly-Quilon (British Section (Travancore).	....	19·05	...	...	...				
	(d)		Karaikkal-Peralam . .	...	14·65	...	...	...				
	(e)		Pondicherry . . .	...	7·85	...	...	...	1,235·79	...	...	1,235·79
23	(a)	Burma (B.) . . .	Burma	...	1,260·50*	...	...	...	1,260·50	...	...	1,260·50
24	(a)	Morvi (M. R. W.) .	Morvi	...	...	94·36	...	...	...	94·36	...	94·36
25	(a)	Barsi Light (B. L.) .	Barsi Light	...	...	21·59	...	...	...	21·59	...	21·59
26	(a)	Tarakeshwar-Magra (B. P.).	Tarakeshwar-Magra . .	...	...	31·12	...	...	...	31·12	...	31·12
27	(a)	Ranaghat-Krishnagar (R. K. L.)	Ranaghat-Krishnagar .	...	...	20·25	...	...	...	20·25	...	20·25
28	(a)	Tezpur-Balipara (T. B.)	Tezpur-Balipara . . .	...	...	20·10	...	...	...	20·10	...	20·10
29	(a)	Darjeeling-Himalayan (D. H.)	Darjeeling-Himalayan .	...	...	...	51·00	...	...	...	51·00	51·00
30	(a)	Howrah-Amta (H. A.) .	Howrah-Amta . . .	...	...	...	28·69	...	...	...	28·69	28·69
31	(a)	Howrah-Sheakhala (H. S.)	Howrah-Sheakhala . .	...	...	...	19·75	...	...	...	19·75	19·75
32	(a)	Jorhat (J) . . .	Jorhat	...	...	...	30·00	...	...	...	30·00	30·00
33	(a)	Thaton-Duyinzaik (T. D.)	Thaton-Duyinzaik . .	...	...	7·76	...	...	...	7·76	...	7·76
			Total railway mileage open in India and Burma on the 31st December 1902 .					14,118·33	10,981·15	570·10	261·76	25,931·34

* From Rangoon to Insein, 9·00 miles, Rangoon to Pazundaung, 0·70 mile and Myohaung to Mandalay, 2·45 miles are laid with double track.

Appendix 3.
Additions to mileage.

APPENDIX 3.

Mileage added to the Railway System of India during the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

Note.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1902.	Date of opening for traffic.	Additions in miles made to open mileage during 1902.						
						Length.			Total mileage added to railway administration.			
Main.	Sub.					5′ 6″	3′ 3⅜″	2′ 6″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″
1	(a)	East Indian	East Indian	Mile 132 from Howrah to Sitarampur.	15th April	6·99	...	...				
				Serae East Bank (Barun) to Rajhara.	3rd May	67·31	...	...				
				Rajhara to Daltongunj	15th December	10·65	...	...				
				Portion of the Moghal Sarai-Gya branch.	3rd May	0·94	...	...	85·89	...	...	...
2	(b)	Eastern Bengal State.	Eastern Bengal State.	Bansra diversion extension	17th November	0·75	...	...				
				Moghalhat to Gitaldaha junction.	2nd January	...	1·86	...				
				Gitaldaha junction to Dhubri	23rd September	...	36·75	...	0·75	38·61	...	...
4	(a)	Bengal-Nagpur	Bengal-Nagpur	Hooghly foreshore to Kidderpore Docks.	10th April	0·60	...	...	0·60	...	...	...
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Moghal Sarai to Bechupur	31st October	1·41	...	...	1·41	...	...	...
6	(a)	North Western State.	North Western	Phulji branch extension	31st March	0·34	...	...				
	(b)		Southern-Punjab	Delhi Brewery to Delhi	20th December	0·79	...	...				
	(f)		Khusalgarh-Kohat-Thal.	Khusalgarh West to Kohat	25th May	...	...	29·70	1·13	...	29·70	...
8	(j)	Bombay, Baroda and Central India.	Vijapur-Kalol-Kadi.	Kalol to Vijapur	10th June	...	29·44	...	...	29·44	...	...
10	(a)	Madras ...	Madras	Badagara to Tellicherry	1st May	14·73	...	...				
	(d)		Shoranur-Cochin	Shoranur to Ernakulam	2nd June	...	64·75	...	14·73	64·75	...	...
12	(b)	Bengal-Dooars	Bengal-Dooars extensions.	Oodlabari to Bagrakote	1st January	...	3·46	...	...	3·46	...	...
16	(b)	Bengal and North-Western.	Tirhoot	Kosi bridge and approaches (Katariah to Kursela).	26th June	...	*3·75	...	...	...	...	...
18	(b)	Jodhpur-Bikaner	Bikaner	Suratgarh to Bhatinda	9th September	...	88·00	...	...	88·00	...	...
22	(a)	South Indian	South Indian	Madura to Mandapam	1st August	...	89·50	...				
	(b)		Tanjore District Board (Mayavaram-Mutupet)	Mutupet to Pattukottai	20th October	...	17·03	...				
	(c)		Tinnevelly-Quilon (Travancore) (British section).	Tinnevelly Bridge to Kallidaikurichi.	1st June	...	19·05	...	...	125·58	...	...
23	(a)	Burma	Burma	Bassein to Henzada	15th December	...	82·25	...	...	82·25	...	...
				Total mileage added during 1902					104·51	432·09	29·70	...

* Omitted from the total as the length was previously included in the open mileage when traffic was worked over a temporary pile bridge.

APPENDIX 3—*concld.*

Mileage added to the Railway System of India during the Calendar year 1902—concluded.

(Referred to in paragraph 6 of Report.)

Note.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classification No.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1902.	Date of opening for traffic.	Additions in miles made to open mileage during 1902. Length.			Total mileage added to railway administration.			
Main.	Sub.					5′ 6″	3′ 3⅜″	2′ 6″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″
		MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1903.										
1	(a)	East Indian	East Indian	Katrasgarh to Kanoodih	7th March	7·80	...	...	7·80	...	...	...
4	(a)	Bengal-Nagpur	Bengal-Nagpur	Midnapore to Bhojudih	1st February	114·50	...	...				
				Ramkanali to Chaurashi	1st February	4·67	...	...	119·17	...	...	...
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Partabgarh to Siwait	20th March	24·00	...	...	24·00	...	...	...
8	(a)	Bombay, Baroda and Central India.	Ahmedabad-Dholka.	Sabarmati to Bavla	23rd February	...	25·00	...	...	25·00	...	...
12	(b)	Bengal-Dooars	Bengal-Dooars extension.	Chalsa to Chengmari	1st January	...	15·00	...				
				Chengmari to Dalgaon	23rd March	...	14·00	...	...	29·00	...	...
14	(a)	Assam-Bengal	Assam-Bengal	Lakwa to Bhojo	1st February	...	12·75	...				
				Bhojo to Tinsukia	1st March	...	41·75	...	...	54·50	...	...
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Turtipur bridge and approaches	15th January	...	*3·00	...				
				Azamgarh to Shahganj	14th February	...	34·81	...				
				Phephna to Ghazipur Ghat	10th March	...	31·16	...	...	65·97	...	...
23	(a)	Burma	Burma	Hsipaw to Lashio	1st March	...	50·94	...	...	50·94	...	...
				Total mileage added from 1st January to 31st March 1903					150·97	225·41	...	...
		MILEAGE ADDED FROM 1ST TO 30TH APRIL 1903.										
4	(a)	Bengal-Nagpur	Bengal-Nagpur	Bhojudih to Bhaga	20th April	7·00	...	...				
	(d)		Jubbulpore-Gondia extension	Gondia to Neinpur	18th April	...	...	74·00	7·00	...	74·00	...
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Sultanpur to Chilbila	10th April	23·00	...	...	23·00	...	...	...
6	(a)	North Western	North Western State.	Malakwal to Sargodha	1st April	46·50	...	...				
	(f)		Khusalgarh-Kohat-Thal.	Kohat to Thal	1st April	...	...	62·03	46·50	...	62·03	...
8	(o)	Bombay, Baroda and Central India.	Ahmedabad-Dholka.	Bavla to Dholka	1st April	...	8·54	...	...	8·54	...	...
17	(b)	Rohilkund and Kumaon.	Lucknow-Bareilly.	Dudhwa to Chandan Chowki	3rd April	...	5·93	...	...	5·93	...	...
23	(a)	Burma	Burma	Lepadan to Tharawaw	17th April	...	23·00	...				
				Henzada to Henzada Shore	17th April	...	3·00	...	...	26·00	...	...
				Total mileage added from 1st to 30th April 1903					76·50	40·47	136·03	...
				GRAND TOTAL MILEAGE OPEN ON THE 30TH APRIL 1903					14,345·80	11,247·03	706·13	261·76

* Omitted from the total as the length was previously included in the open mileage when traffic was worked over a temporary pile bridge.

Appendix 4.
Mileage open yearly.

APPEN

Railway mileage open for traffic year by year under each railway

(Referred to in para

N.B.—A reference to Appendix 2 will furnish the key

Note.—For classification of railways, see

For particulars of open railways,

For mileage added from 1st Janu

For mileage under construction

Class : No.	1	2	3	4	5	6	7		8
Calendar Year.	E. I.	E. B. S.	B. C.	B. N.	O. & R.	N. W.	G. I. P. (*a*) to (*c*).	I. M. (*d*) to (*h*).	B., B. & C. I.
1853	...	...	...	...	...	...	20	...	...
1854	38	...	...	...	...	...	33	...	...
1855	120	...	...	...	...	...	49	...	...
1856	120	...	...	...	...	...	87	...	...
1857	120	...	...	...	...	...	87	...	...
1858	139	...	...	...	...	...	193	...	...
1859	286	...	...	...	...	...	244	...	...
1860	370	...	...	...	...	...	297	...	35
1861	561	...	...	...	...	110	438	...	134
1862	877	123	...	...	...	142	495	...	167
1863	960	136	...	...	...	142	555	...	185
1864	1,131	140	...	...	...	142	588	...	306
1865	1,155	140	...	...	...	350	704	...	306
1866	1,155	140	...	...	...	350	825	...	306
1867	1,380	140	...	...	42	403	855	...	306
1868	1,380	140	...	...	42	403	876	...	307
1869	1,380	140	...	...	42	621	876	...	307
1870	1,380	140	...	...	42	663	1,269	...	312
1871	1,530	185	...	...	42	663	1,290	...	350
1872	1,530	185	...	...	293	663	1,295	...	389
1873	1,530	187	...	...	456	663	1,295	...	524
1874	1,530	187	...	...	540	663	1,313	...	777
1875	1,530	187	...	...	544	725	1,336	...	917
1876	1,530	187	...	...	544	767	1,341	...	996
1877	1,530	321	...	...	544	767	1,341	...	1,001
1878	1,530	419	...	...	547	1,268	1,487	34	1,098
1879	1,588	430	...	...	547	1,268	1,494	66	1,237
1880	1,600	430	...	53	547	1,541	1,494	66	1,412
1881	1,600	454	...	98	547	1,671	1,494	75	1,760
1882	1,603	483	20	149	547	1,732	1,494	86	1,775
1883	1,605	504	52	149	548	1,759	1,494	86	1,866
1884	1,605	519	125	149	595	1,866	1,494	132	2,123
1885	1,633	606	125	149	607	1,873	1,494	132	2,187
1886	1,633	607	125	186	686	1,873	1,493	174	2,188
1887	1,632	645	125	186	692	2,414	1,493	173	2,208
1888	1,632	672	125	225	692	2,458	1,493	268	2,213
1889	1,632	746	125	348	692	2,541	1,493	734	2,219
1890	1,632	764	125	584	692	2,567	1,493	734	2,246
1891	1,794	777	125	831	692	2,482	1,492	734	2,313
1892	1,794	812	125	831	692	2,612	1,490	734	2,313
1893	1,797	834	125	899	741	2,613	1,490	734	2,355
1894	1,848	838	125	992	796	2,615	1,490	734	2,445
1895	1,884	836	125	1,067	797	2,666	1,490	922	2,445
1896	1,884	837	125	1,140	847	2,903	1,491	922	2,505
1897	1,889	840	125	1,176	892	3,406	1,491	922	2,585
1898	1,897	883	125	1,384	1,030	3,406	1,491	970	2,622
1899	1,974	944	125	1,507	1,030	3,556	1,491	1,238	2,738
1900	2,104	989	125	1,603	1,149	3,614	1,561	1,239	2,764
1901	2,101	1,001	125	1,634	1,149	3,749	1,562	1,239	2,753
1902	2,187	1,044	125	1,627	1,151	3,780	1,562	1,239	2,783

DIX 4.

administration and during the Viceroyalty of each Governor General.

graph 7 of Report.)

to the code letters used to express railway systems.

Appendix 1.

see Appendix 2.

ary 1902 to 30th April 1903, see Appendix 3.

or sanctioned, see Appendix 5.

9	10	12	13	14	15	16	17	18	19	20	Class : No.
N. G. S.	M.	B. D.	D. S.	A. B.	D.	B. & N. W.	R. & K.	J. B.	U. C.	B. G. J. P.	Calendar Year.
...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	1855
...	65	...	...	...	...	...	...	...	...	...	1856
...	80	...	...	...	...	...	...	...	...	...	1857
...	95	...	...	...	...	...	...	...	...	...	1858
...	95	...	...	...	...	...	...	...	...	...	1859
...	136	...	...	...	...	...	...	...	...	...	1860
...	296	...	...	...	...	...	...	...	...	...	1864
...	447	...	...	...	...	...	...	...	...	...	1862
...	447	...	...	...	...	...	...	...	...	...	1863
...	569	...	...	...	...	...	...	...	...	...	1864
...	609	...	...	...	...	...	...	...	...	...	1865
...	643	...	...	...	...	...	...	...	...	...	1866
...	643	...	...	...	...	...	...	...	...	...	1867
...	676	...	...	...	...	...	...	...	...	...	1868
...	705	...	...	...	...	...	...	...	...	...	1869
...	781	...	...	...	...	...	...	...	...	...	1870
...	830	...	...	...	...	...	...	...	...	...	1871
...	830	...	...	...	...	...	...	...	...	...	1872
...	858	...	...	...	...	...	...	...	...	...	1873
121	858	...	...	...	...	53	...	...	...	...	1874
121	858	...	...	...	...	43	...	...	...	...	1875
121	858	...	...	...	...	43	...	...	...	...	1876
121	858	...	...	...	...	78	...	...	...	...	1877
121	858	...	...	...	...	85	...	...	...	...	1878
121	858	...	...	...	...	85	...	...	...	...	1879
121	858	...	...	...	...	85	...	...	...	105	1880
121	858	...	...	...	...	85	...	...	...	192	1881
121	861	...	15	...	4	85	...	18	...	192	1882
121	861	...	38	...	5	193	...	18	...	193	1883
121	861	...	69	...	5	301	90	44	...	193	1884
121	861	...	77	...	4	529	99	64	...	193	1885
204	859	...	77	...	5	622	146	64	...	193	1886
205	827	...	77	...	5	635	196	124	...	193	1887
306	838	...	77	...	5	649	195	124	...	209	1888
351	839	...	77	...	5	649	195	124	...	332	1889
354	839	...	77	...	5	699	212	124	...	333	1890
351	839	...	77	...	5	739	283	291	...	333	1891
354	839	...	77	...	5	756	283	291	...	333	1892
354	1,067	32	77	...	5	756	397	364	...	380	1893
353	1,072	36	77	...	5	756	324	364	...	380	1894
353	1,070	36	77	129	5	756	324	364	60	380	1895
353	1,082	36	77	286	5	820	324	364	60	380	1896
353	1,081	36	87	361	5	827	324	364	60	434	1897
351	1,259	36	85	379	5	928	324	406	61	455	1898
505	1,356	36	85	435	5	1,103	324	475	67	455	1899
736	1,359	102	85	436	5	1,224	324	609	67	455	1900
742	1,397	111	88	589	5	1,280	324	736	67	455	1901
742	1,477	114	88	589	5	1,283	325	824	67	455	1902

Appendix 4.
Mileage open yearly.

APPEN

Railway mileage open for traffic year by year under each railway

(Referred to in para

N.B.—A reference to Appendix 2 will furnish the key

For classification of railways, see

For particulars of open railways,

For mileage added from 1st Janu

For mileage under construction

Class: No.	21	22	23	24	25	26	27	28		29
Calendar Year.	S. M.	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	C. C.	D. H.
1853	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...
1861	...	48	...	...	...	...	...	...	...	...
1862	...	82	...	...	...	...	...	...	...	...
1863	...	82	...	...	...	...	...	...	...	...
1864	...	82	...	...	...	...	...	...	...	...
1865	...	99	...	...	...	...	...	...	...	...
1866	...	144	...	...	...	...	...	...	...	...
1867	...	160	...	...	...	...	...	...	...	...
1868	...	184	...	...	...	...	...	...	...	...
1869	...	184	...	...	...	...	...	...	...	...
1870	...	184	...	...	...	...	...	...	...	...
1871	...	184	...	...	...	...	...	...	...	...
1872	...	184	...	...	...	...	...	...	...	...
1873	...	184	...	...	...	...	...	...	...	...
1874	...	184	...	...	...	...	...	...	...	...
1875	...	280	...	...	...	...	...	...	...	...
1876	...	473	...	...	...	...	...	...	...	...
1877	...	598	161	...	...	...	...	...	...	...
1878	...	611	161	...	...	...	...	...	...	...
1879	...	639	161	...	...	...	...	...	...	...
1880	...	653	167	...	...	...	...	...	...	30
1881	58	661	167	...	...	...	...	...	...	49
1882	86	661	167	...	...	...	...	...	...	50
1883	87	662	167	...	...	...	...	...	...	50
1884	354	662	260	...	...	...	...	...	...	51
1885	455	662	333	...	...	...	...	...	...	51
1886	618	662	331	51	...	...	...	...	7	51
1887	1,030	745	333	68	...	...	...	...	7	51
1888	1,044	745	441	68	...	...	...	...	7	51
1889	1,325	745	553	68	...	...	...	...	7	51
1890	1,390	787	556	94	...	...	...	...	7	51
1891	1,435	909	617	94	...	...	...	...	8	51
1892	1,518	1,050	717	94	...	...	...	...	8	51
1893	1,606	1,049	730	94	...	...	...	...	8	51
1894	1,604	1,103	745	94	...	12	...	...	8	51
1895	1,604	1,103	834	94	...	31	...	...	8	51
1896	1,604	1,103	886	94	...	31	...	...	8	51
1897	1,604	1,103	887	94	22	31	...	...	8	51
1898	1,604	1,094	936	94	22	31	...	20	8	51
1899	1,643	1,107	993	94	22	31	20	20	8	51
1900	1,643	1,110	1,124	94	22	31	20	20	*	51
1901	1,643	1,110	1,178	94	22	31	20	20	...	51
1902	1,643	1,236	1,260	94	22	31	20	20	...	51

* Closed for traffic from the

DIX 4—*concld.*

Appendix 4.
Mileage open yearly.

administration and during the Viceroyalty of each Governor General.

graph 7 of Report.)

to the code letters used to express railway systems.

Appendix 1.

see Appendix 2.

ary 1902 to 30th April 1903, see Appendix 3.

or sanctioned, see Appendix 5.

30	31	32	33	Total actual mileage opened during the year.	Deduct corrections, abandonments, etc., of mileage.	Net mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.	Class: No.
H. A.	H S.	J.	T. D.							Calendar Year.
...	...	...	...	20	...	20	20	169	Marquis of Dalhousie	1853
...	...	...	...	50	+1	51	71			1854
...	...	...	...	99	—1	98	169			1855
...	...	...	...	103	...	103	272	1,418	Earl Canning	1856
...	...	...	...	15	...	15	287			1857
...	...	...	...	140	...	140	427			1858
...	...	...	...	198	...	198	625			1859
...	...	...	...	212	+1	213	838			1860
...	...	...	...	748	+1	749	1,587			1861
...	...	...	...	746	...	746	2,333	920	Earl of Elgin	1862
...	...	...	...	174	...	174	2,507			1863
...	...	...	...	451	...	451	2,958	1,501	Lord Lawrence	1864
...	...	...	...	405	...	405	3,363			1865
...	...	...	...	200	...	200	3,563			1866
...	...	...	...	367	—1	366	3,929			1867
...	...	...	...	78	+1	79	4,008			1868
...	...	...	...	248	—1	247	4,255	1,066	Earl of Mayo	1869
...	...	...	...	516	...	516	4,771			1870
...	...	...	...	302	+1	303	5,074			1871
...	...	...	...	303	—8	295	5,369	1,467	Lord Northbrook	1872
...	...	...	...	327	+1	328	5,697			1873
...	...	...	...	477	+52	529	6,226			1874
...	...	...	...	366	—51	315	6,541			1875
...	...	...	...	319	...	319	6,860	2,621	Lord Lytton	1876
...	...	...	...	460	...	460	7,320			1877
...	...	...	...	898	+1	899	8,219			1878
...	...	...	...	269	+6	275	8,494			1879
...	...	...	...	668	...	668	9,162			1880
...	...	...	...	728	...	728	9,890	2,469	Marquis of Ripon	1881
...	...	...	...	252	+7	259	10,149			1882
...	...	...	...	359	—50	309	10,458			1883
...	...	12	...	1,190	—17	1,173	11,631			1884
...	...	29	8	651	+1	652	12,283	2,945	Earl of Dufferin and Ava	1885
...	...	27	8	643	—34	609	12,892			1886
...	...	31	8	1,212	—1	1,211	14,103			1887
...	...	31	8	482	—9	473	14,576			1888
...	...	28	8	1,326	—15	1,311	15,887	3,928	Marquis of Lansdowne	1889
...	...	28	8	515	—1	514	16,401			1890
...	...	28	8	997	—90	907	17,308			1891
...	...	28	8	504	+3	507	17,815			1892
...	...	28	8	689	...	689	18,504			1893
...	...	28	8	409	—13	396	18,900	3,536	Earl of Elgin	1894
...	...	28	8	657	—10	647	19,547			1895
...	...	28	8	706	+1	707	20,254			1896
14	17	28	8	845	+16	861	21,115			1897
28	19	28	8	898	+27	925	22,040			1898
29	20	28	8	1,484	—1	1,483	23,523	3,891	Lord Curzon	1899
29	20	30	8	1,287	—8	1,229	24,752			1900
29	20	30	8	576	+35	611	25,363			1901
29	20	30	8	566	+2	568	25,931			1902
								25,931		

25th March 1900, and subsequently abandoned.

Appendix 5.
Miles in construction.

APPENDIX 5.

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

Classification No. Main.	Classification No. Sub.	Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. Mileage sanctioned to be constructed. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Total sanctioned for construction by the railway administration. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Remarks.
				Shikohabad to Farukhabad.	15th January 1898.	65·82	...	...	...					Work commenced.
				Katrasgarh to Khanoodih.	1st November 1901.	7·80	...	...	...					Since opened.
				Jherriah to Dhanbad.	1st November 1901.	3·75	...	...	...					Work commenced.
				Tasra siding ...	1st November 1901.	1·75	...	...	...					Work commenced
	(a)		East Indian ...	Northern half of the Mulkeera-Katrasgarh cross connection.	1st November 1901.	0·71	...	...	...					Work commenced.
				Manpur to 0·87 mile beyond Gurpa.	25th March 1902.	25·25	...	...	...					Work commenced.
1		East Indian ...		Mile 0·87 beyond Gurpa to Kodarma.	20th June 1902.	18·19	...	...	...					Work commenced.
				Kodarma to Hariharpur.	20th June 1902.	56·35	...	....	...					Work commenced.
	(e)		Rewah ...	Rewah to Sutna .	18th May 1899.	...	...	31·81	...	179·62	...	31·81	...	Commencement of work not yet authorised.
				Panchooria to the Ganges.	12th December 1890.	6·00	...	...	...					Constructed, but not worked.
	(a)		Eastern Bengal State.	Extension of Chitpore terminus.	26th March 1901.	1·66	...	...	...					Work commenced.
				Kankurgachi chord.	19th February 1902.	2·25	...	...	...					Not commenced.
2		Eastern Bengal State.		Kanaghat to Moorshedabad.	20th June 1902.	75·00	...	...	...					Work commenced.
	(b)		Eastern Bengal State.	Golokganj to the Brahmaputra opposite Gauhati.	31st October 1902.	...	151·62	...	...	84·91	151·62	...	...	Work commenced.
				Midnapore to Bhojudih.	1st June 1899.	114·50	...	...	...					Since opened.
				Ramkanali to Noodheeha in the Chaurashi coalfields.	17th July 1901.	9·48	...	...	...					Portion since opened.
				Bhojudih to Hariharpur.	1st November 1901.	27·90	...	...	...					Work commenced.
4	(a)	Bengal-Nagpur...	Bengal-Nagpur	Bhojudih to Parthadihi.	1st November 1901.	1·45	...	...	...					Work commenced.
				Bhojudih to Mhoda including the Bhaga connection.	1st November 1901.	21·36	...	...	...					Portion since opened.
				Bhowra siding .	1st November 1901.	1·50	...	...	...					Work commenced.
				Southern half of the Mulkeera-Katrasgarh cross connection.	1st November 1901.	0·71	...	...	...	176·90	...	...	...	Work commenced.
					Carried over ...					176·90	...	...	...	
										264·53	151·62	31·81	...	

APPENDIX 5—*contd.*

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

Classification No.		Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed.				Total sanctioned for construction by the railway administration.				Remarks.
Main.	Sub.					5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	
				Brought forward	...					264·53	151·62	31·82	...	
										176·90	...	...	...	
4	(*d*)	Bengal-Nagpur—*concld.*	Jubbulpur-Gondia extension.	Jubbulpore to Gondia.	23rd January 1901.	...	...	143·43	...					Portion since opened.
				Neinpur to Mandla	23rd January 1901.	...	...	21·75	...					Work commenced.
				Neinpur to Chindwara.	23rd January 1901.	...	...	87·49	...					Work commenced.
	(*e*)		Moharbhanj*	Baripada Road station to Baripada.	18th July 1902.	...	...	28·50	...	176·90	...	28·17	...	Work commenced.
5	(*a*)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Allahabad to Fyzabad.	8th November 1901.	194·67†	...	...						Portion since opened.
				Palamau to Madhoganj.	15th August 1902.	14·47	...	...	...	109·14	...	...	...	Work commenced.
	(*a*)		North Western State.	Jech Doab line (Malakwal to the Karana Hills).	27th November 1901.	51·40	...	...	...					Portion since opened.
6		North Western State.		From a point 12 miles South of Quetta to Nushki.	6th August 1902.	82·50	...	...	...					Work commenced.
	(*f*)		Khushalgarh-Kohat-Thal.	Kohat to Thal .	31st October 1900.	...	...	62·03	...	133·90	...	62·03	...	Since opened.
7	(*d*)	Great Indian Peninsula.	Indian Midland...	Ait to Kunch .	23rd September 1902.	8·85	...	...	...					Work commenced.
	(*h*)		Gwalior Light ...	Gwalior to Sabulgarh.	2nd October 1901.	...	...	...	57·86	8·85	...	...	57·86	Not commenced.
	(*a*)		Bombay, Baroda and Central India.	Godhra to Baroda.	6th June 1902.	44·00	...	...	...					Work commenced.
8	(*g*)		Rajputana-Malwa	Rewari to Phulera	20th December 1901.	...	133·32	...	...					Commencement of work not yet authorised.
	(*j*)		Vijapur-Kalol-Kadi.	Kalol to Kadi .	15th August 1901.	...	12·20	...	...					Work commenced.
	(*l*)	Bombay, Baroda and Central India.	Gaekwar's Dabhoi	Padhra to Mhoba	12th February 1902.	...	...	9·20	...					Work commenced.
	(*m*)*		Jaipur (Siwai-Madhopur).	Sanganer to Siwai Madhopur.	2nd December 1897.	...	72·85	...	...					Completion stopped for want of funds.
	(*o*)		Ahmedabad-Dholka.	Sabarmati to Dholka.	2nd October 1901.	...	33·54	...	...	44·00	251·91	9·20	...	Since opened.
				Carried over	...					737·32	403·53	384·21	57·86	

* Question of working agency not yet finally settled.
† Excludes 2·45 miles of Oudh and Rohilkhand State railway existing line between Sultanpur Road and Partabgarh stations.

Appendix 5.
Miles in construction.

APPENDIX 5—*contd.*

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

Classification No.		Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed.								Remarks.
						Mileage sanctioned to be constructed.				Total sanctioned for construction by the railway administration.				
Main.	Sub.					5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	
					Brought forward					737·32	403·53	384·21	57·86	
	(*a*)		Madras ...	Tellicherry to Azhikal.	6th May 1897	17·07	...	...	...					Work commenced.
	(*b*)		Madras (North-East line).	Korukkupettai to Bassein Road.	...	0·93	...	...	...					Work commenced.
10	(*f*)	Madras ...	Azhikal-Mangalore.	Azhikal to Mangalore.	28th June 1901	77·27	...	...	...					Work commenced.
	(*g*)		Morappur-Dharmapuri.	Morappur to Dharmapuri.	4th December 1902.	...	...	18·37	...					Work commenced.
	(*h*)		Tirupattur-Krishnagiri.	Tirupattur to Krishnagiri.	4th December 1902.	...	...	26·46	...	95·27	...	44·83	...	Work commenced.
11	(*a*)	Agra-Delhi Chord	Agra-Delhi Chord	Agra to Delhi ..	15th September 1898.	121·16	...	...	...	121·16	...	...	...	Work commenced.
12	(*b*)	Bengal-Dooars ...	Bengal-Dooars Extensions.	Chalsa to Madarihat.	2nd March 1898.	...	38·80	...	...	...	38·80	...	...	Portion since opened.
	(*a*)		Assam-Bengal	Damchara to Lumding.	28th May 1891	...	100·74	...	...					Work commenced.
14		Assam-Bengal		Lakwa to Tinsukia.	28th May 1891	...	54·50	...	...					Since opened.
	(*b*)		Noakhali (Bengal.)	Laksam *viâ* Noakhali to Shahib Ghatta.	6th April 1901	...	34·95	...	...	...	190·19	...	...	Work commenced.
			Bengal and North-Western	Azamgarh to Shahganj.	18th May 1897	...	34·81	...	...					Since opened.
16	(*a*)	Bengal and North-Western.		Phephna to Ghazipur Ghat.	23rd December 1901.	...	31·16	...	...					Since opened.
				Aunrihar to Jaunpur.	1st November 1902.	...	36·14	...	...					Not commenced.
	(*b*)		Tirhoot ...	Sakri to Jainagar	1st June 1899	...	30·47	...	...	...	132·58	...	...	Commencement of work not yet authorised.
17	(*b*)	Rohilkund and Kumaon.	Lucknow-Bareilly section.	Dudhwa to the Mohan river.	1st March 1901.	...	5·93	...	...	...	5·93	...	...	Since opened.
21	(*i*)	Southern Mahratta.	Bellary-Rayadrug	Bellary to Rayadrug.	4th December 1902.	...	33·00	...	...					Work commenced.
	(*j*)		Hospet-Kottur ...	Hospet to Kottur	4th December 1902.	...	38·10	...	...	...	71·10	...	...	Work commenced.
	(*a*)		South Indian	Saidapet to Madras Beach.	7th November 1902.	...	8·38	...	...					Work commenced.
				Mutanandal to Sivagunga.	21st April 1899	...	9·00	...	...					Not commenced.
	(*b*)		Tanjore District Board (Mayavaram-Mutupet)	Pattukkottai to Arantangi.	15th November 1900.	...	28·35	...	...					Work commenced.
				Arantangi Quarry Branch.	15th November 1900.	...	3·90	...	...					Not commenced.
22		South Indian ...		Adirampatnam Salt Siding.	15th November 1900.	...	1·00	...	...					Not commenced.
				Thambikkottai Salt Siding.	15th November 1900.	...	0·63	...	...					Not commenced.
	(*c*)		Tinnevelly-Quilon (Travancore) (British section),	Kallidaikurichi to the British frontier near Shenkottah.	21st April 1899	...	31·33	...	...					Work commenced.
	(*f*)		Tinnevelly-Quilon (Travancore) (Native State section).	Quilon to the British frontier near Shencottah.	21st April 1899	...	57·95	...	...	...	140·54	...	...	Work commenced.
					Carried over					953·75	982·67	429·04	57·86	

APPENDIX 5—*concld.*

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

Classification No. Main.	Sub.	Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. Mileage sanctioned to be constructed. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Total sanctioned for construction by the railway administration. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Remarks.
				Brought forward						953·75	982·67	429·04	57·86	
23	(a)	Burma	Burma	Hsipaw to Lashio	16th October 1895.	...	50·94	...	...					Since opened.
				Letpadan to Tharawa.	7th September 1899.	...	23·00	...	...					Since opened.
				Henzada to Henzada Shore.	7th September 1899.	...	3·00	...	...	...	76·94	...	...	Since opened.
25	(a)	Barsi Light	Barsi Light	Barsi Town to Pandharpur.	6th January 1898.	...	...	30·67	...					Not commenced.
				Barsi Town to Tadwala.	20th November 1900.	...	...	26·70	...	...	...	37·37	...	Not commenced.
30	(a)	Howrah-Amta	Howrah-Amta	Jagatballubpur to Antpur.	20th March 1902.	...	...	...	8·50					Work commenced.
				Antpur to Champadanga.	20th March 1902.	...	...	...	9·00					Commencement of work not yet authorised.
				Antpur to Rajbulhat.	20th March 1902.	...	...	...	3·50	...	...	...	21·00	Commencement of work not yet authorised.
34	(a)	Kalka-Simla	Kalka-Simla	Kalka to Simla	29th June 1898	...	...	60·00	...	...	...	60·00	...	Work commenced.
35	(a)	Shahdara-Saharanpur.	Shahdara-Saharanpur.	Shahdara to Saharanpur.	4th January 1902.	...	...	95·00	...					Not commenced.
				Baraut to Meerut	4th January 1902.	...	...	30·00	...	...	...	125·00	...	Not commenced.
36	(a)	Bukhtiarpur-Behar Light.	Bukhtiarpur-Behar Light.	Bukhtiarpur to Behar.	30th May 1901	...	...	18·75	...	...	...	18·75	...	Work commenced.
37	(a)	Madura District Light.	Madura District Light.	Ammayanayakkanur to Kotagudi.	30th May 1899	...	...	55·00	...					Work commenced.
				Perriyakulam to Krishna Manaik's Tope.	30th May 1899	...	...	5·00	...					Work commenced.
				Theni to Karuvanath.	30th May 1899	...	...	33·00	...	...	...	93·00	...	Work commenced.
38	(a)	Dwara-Therria	Dwara-Therria	Therria Ghat to Maolong.	15th May 1902	...	...	19·50	...	...	...	19·50	...	Commencement of work not yet authorised.
				Maolong to Noorpur or Dwara.										Work commenced.
		Total mileage sanctioned and still remaining to be constructed on the 31st December 1902								953·75	1,059·61	802·66	78·86	

Mileage sanctioned from 1st January to 30th April 1903.

			MILEAGE SANCTIONED FROM 1ST JANUARY TO 31ST MARCH 1903.											
1	(a)	East Indian	East Indian	Mile 170¾ on Jherriah branch to Chandore.	17th March...	4·16	...	...	...	4·16	...	...	...	
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Uska Bazar to Tulsipur.	31st March...	...	53·54	...	...					
				Gaisanri to Jarwa	31st March...	...	12·56	...	...					
				Gorakhpur to Bagaha.	31st March...	...	60·94	...	...	...	127·04	...	...	
			Total mileage sanctioned from 1st January to 31st March 1903							4·16	127·04	...	...	
			MILEAGE SANCTIONED FROM 1ST TO 30TH APRIL 1903.											
5	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Meerut to Hapur	3rd April ...	19·50	...	...	...	19·50	...	...	...	
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Kopaganj to Dhorighat.	28th April ...	...	21·70	...	...	...	21·70	...	...	
			Total mileage sanctioned from 1st to 30th April 1903							19·50	21·70	...	...	

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N. B.—When figures cease to be shown under any railway it is to be understood that such

EAST INDIAN RAILWAY SYSTEM (2,186·58 MILES).

Railway.	(a) East Indian (1,923·35 miles).								(b)		(c)		(d)	
	East Indian, 5′ 6″. (1,923·35 miles).		Patna-Gya, 5′ 6″. (57·20 miles).		Naihati, 4′ 0″. (27·25 miles).		Dildarnagar-Ghazipur, 5′ 6″. (12·00 miles).		Delhi-Umballa-Kalka, 5′ 6″. (162·24 miles).		South Behar, 5′ 6″. (78·76 miles).		Tarkessur, 5′ 6″. (22·23 miles).	
Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	131	62·18	...	...	...	...	...	...	...	...	...	...	...	...
1855	108	51·97	...	...	...	...	...	...	...	...	...	...	...	...
1856	167	40·62	...	...	...	...	...	...	...	...	...	...	...	...
1857	232	38·12	...	...	...	...	...	...	...	...	...	...	...	...
1858	279	46·49	...	...	...	...	...	...	...	...	...	...	...	...
1859	253	44·77	...	...	...	...	...	...	...	...	...	...	...	...
1860	231	48·36	...	...	...	...	...	...	...	...	...	...	...	...
1861	240	46·49	...	...	...	...	...	...	...	...	...	...	...	...
1862	192	53·81	...	...	...	...	...	...	...	...	...	...	...	...
1863	222	55·01	...	...	...	...	...	...	...	...	...	...	...	...
1864	253	50·79	...	...	36	48·88	...	...	...	...	...	...	...	...
1865	311	44·82	...	...	41	63·28	...	...	...	...	...	...	...	...
1866	374	44·24	...	...	36	105·15	...	...	...	...	...	...	...	...
1867	369	48·91	...	...	45	68·81	...	...	...	...	...	...	...	...
1868	346	44·88	...	...	57	83·60	...	...	...	...	...	...	...	...
1869	399	44·42	...	...	60	59·64	...	...	...	...	...	...	...	...
1870	424	43·68	...	...	60	48·77	...	...	...	...	...	...	...	...
1871	338	43·36	...	...	55	58·07	...	...	...	...	...	...	...	...
1872	368	41·44	...	...	53	57·14	...	...	...	...	...	...	...	...
1873	382	38·75	...	...	60	60·06	...	...	...	...	...	...	...	...
1874	474	35·70	...	...	61	67·22	...	...	...	...	...	...	...	...
1875	374	39·58	...	...	57	76·42	...	...	...	...	...	...	...	...
1876	452	35·08	...	...	54	111·15	...	...	...	...	...	...	...	...
1877	565	31·85	...	...	64	100·47	...	...	...	...	...	...	...	...
1878	507	35·69	...	...	64	79·41	...	...	...	...	...	...	...	...
1879	552	32·86	121	55·84	65	67·56	...	...	...	...	...	...	...	...
1880	549	33·04	162	56·13	49	105·33	56	128·33	...	...	...	...	...	...
1881	578	31·85	173	65·11	47	79·20	63	99·52	...	...	...	...	...	...
1882	601	36·94	184	60·51	51	73·05	73	85·24	...	...	...	...	...	...
1883	630	36·95	158	51·93	57	69·63	80	49·87	...	...	...	...	...	...
1884	558	37·61	174	57·48	55	90·84	75	58·37	...	...	...	...	...	...
1885	589	35·25	174	52·52	54	82·08	75	52·28	...	...	...	...	227	52·57
1886	591	34·59	180	52·01	59	85·29	76	52·05	...	...	...	...	215	52·15
1887	583	31·70	178	46·53	65	70·57	77	46·45	...	...	...	...	228	49·86
1888	567	33·24	168	47·97	74	78·39	74	91·13	...	...	...	...	242	51·10
1889	557	34·59	175	48·70	73	78·18	...	...	...	...	...	...	246	55·51
1890	538	31·35	174	45·80	71	78·01	...	...	...	...	...	...	248	49·64
1891	615	27·21	204	42·76	66	62·97	...	...	128	48·00	...	...	264	46·42
1892	587	28·47	193	42·94	...	...	...	...	129	48·00	...	...	254	47·28
1893	584	27·44	...	...	...	...	...	...	143	48·00	...	...	245	46·86
1894	604	30·87	...	...	...	...	...	...	159	48·00	...	...	265	48·96
1895	603	31·07	...	...	...	...	...	...	174	48·00	...	...	267	48·37
1896	597	31·98	...	...	...	...	...	...	158	48·00	...	...	271	49·88
1897	649	29·47	...	...	...	...	...	...	186	48·00	...	...	270	48·01
1898	658	31·76	...	...	...	...	...	...	191	48·00	...	...	272	49·54
1899	697	32·84	...	...	...	...	...	...	172	48·00	101	35·00	267	50·58
1900	708	34·78	...	...	...	...	...	...	163	48·00	114	35·00	288	51·61
1901	733	35·06	...	...	...	...	...	...	213	48·00	125	40·02	285	52·23
1902	687	36·55	...	...	...	...	...	...	221	48·00	122	45·00	283	53·32

* Converted to 5′ 6″ gauge in 1892.

Note.—Earnings per mile per week exclude steam-boat

Note.—The length shown against each railway system,

DIX 6.

Appendix 6.
Weekly earnings.

railways per mile per week

to gross earnings.

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railway has been amalgamated with the system by which it has been worked.

2

EASTERN BENGAL STATE RAILWAY SYSTEM (1,044·29 MILES).

(a) Eastern and Southern sections. (277·02 miles).				(b) Northern, Behar and Dacca sections (621·16 miles).								(c)		(d)		(e)		Railway Calendar year.
Eastern and Southern sections, 5′ 6″. (277·02 miles).		Calcutta and South-Eastern section 5′ 6″. (56·00 miles).		Northern Bengal State, 3′ 3¾″. (249·25 miles).		Kaunia-Dharlla, 2′ 6″. (37·03 miles).		Northn. and Behar sec. 3′ 3¾″ gauge, incig. Kaunia-Dharlla & Santrabari ext. 2′ 6″ gauge. (535·24 miles).		Dacca section, 5′ 3¾″. (85·92 miles).		Brahmaputra-Sultanpur 3′ 3¾″. (59·37 miles).		Mymensingh-Jamalpur-Jagannathganj, 3′ 3¾″. (53·14 miles).		Cooch Behar, 2′ 6″. (33·60 miles).		
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
94	55·59	36	128·39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
149	48·43	38	131·07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
176	53·67	53	137·03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
233	48·98	75	114·32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1865
243	51·05	79	118·59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
279	48·71	64	133·66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
308	46·33	60	173·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
313	50·29	55	145·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
335	55·69	55	104·88	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
270	56·01	40	90·82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
344	66·60	40	92·07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
377	49·08	70	102·56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
433	52·18	68	78·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
356	62·16	71	80·48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
401	43·66	68	108·62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
529	41·07	79	81·74	20	140·29	...	...	...	...	...	...	...	...	...	...	...	...	1877
512	43·71	83	95·08	81	75·31	...	...	...	...	...	...	...	...	...	...	...	...	1878
494	45·97	92	66·44	101	90·96	...	...	...	...	...	...	...	...	...	...	...	...	1879
540	44·81	98	71·32	114	60·10	...	...	...	...	...	...	...	...	...	...	...	...	1880
621	40·91	104	66·43	137	51·23	...	...	...	...	...	...	...	...	...	...	...	...	1881
611	40·60	130	97·42	160	49·04	25	92·97	...	...	...	...	...	...	...	...	...	...	1882
466	50·14	109	54·97	169	49·20	33	81·49	...	...	...	...	...	...	...	...	...	...	1883
*	54·06	*	*	156	69·93	39	78·26	...	...	...	...	...	...	...	...	...	...	1884
380	61·25	†	†	153	70·16	31	107·29	...	...	47	141·12	...	...	...	...	...	...	1885
403	61·97	...	...	189	52·85	29	122·87	...	...	56	111·47	...	...	...	...	...	...	1886
268	52·23	...	...	†	†	†	†	†	†	†	†	...	...	...	...	...	...	1887
546	47·47	...	...	...	...	...	...	†	†	†	†	...	...	...	...	...	...	1888
563	44·60	...	...	...	...	...	...	†	†	†	†	...	...	...	...	...	...	1889
521	47·12	...	...	...	...	...	...	†	†	†	†	...	...	...	...	...	...	1890
562	43·61	...	...	...	...	...	...	181	55·48	93	62·10	...	...	...	...	...	...	1891
562	44·32	...	...	...	...	...	...	165	47·32	85	64·40	...	...	...	...	...	...	1892
529	43·74	...	...	...	...	...	...	182	45·17	96	62·41	...	...	...	...	18	188·94	1893
621	40·33	...	...	...	...	...	...	191	39·14	112	54·46	...	...	...	...	35	78·71	1894
649	35·97	...	...	...	...	...	...	199	40·29	120	51·49	...	...	...	...	46	63·89	1895
676	39·74	...	...	...	...	...	...	212	49·04	115	53·27	...	...	...	...	61	45·00	1896
678	46·48	...	...	...	...	...	...	195	42·44	114	55·92	...	...	...	...	51	45·00	1897
652	41·86	...	...	...	...	...	...	201	44·88	129	54·68	...	...	27	45·00	57	45·00	1898
649	42·30	...	...	...	...	...	...	218	42·21	131	55·78	38	45·00	35	45·00	53	47·95	1899
689	47·75	...	...	...	...	...	...	245	42·14	146	58·83	58	45·00	58	45·00	50	43·41	1900
678	50·89	...	...	...	...	...	...	225	46·91	157	65·12	64	45·00	60	45·00	72	41·48	1901
728	48·18	...	...	...	...	...	...	235	48·65	146	62·12	78	45·00	74	45·00	71	40·31	1902

* Information not available.
† Included with the Eastern and Southern sections.
and proportion of expenses to earnings includes steam-boat.
represents open mileage on the 31st December 1902.

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Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

Railway.	3 BENGAL CENTRAL 5′ 6″. (125·01 miles.)		4 BENGAL-NAGPUR RAILWAY SYSTEM (1,602·24 MILES).								EAST COAST STATE, 5′ 6″. (807·57 miles.)	
			Bengal-Nagpur (1,602·24 miles.)									
			Nagpur-Chattisgarh, 3′ 3½″. (149·00 miles.)		Katni-Umaria, 5′ 6″. (37·00 miles.)		(a) Bengal-Nagpur, 5′ 6″. (1,546·00 miles.)		(b) Raipur-Dhamtari, 2′ 6″. (56·24 miles).			
Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	...	...
1871	...	...	...	...	...	...	...	...	...	...	...	...
1872	...	...	...	...	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...	...	...	...	...	...
1875	...	...	...	...	...	...	...	...	...	...	...	...
1876	...	...	...	...	...	...	...	...	...	...	...	...
1877	...	...	...	...	...	...	...	...	...	...	...	...
1878	...	...	...	...	...	...	...	...	...	...	...	...
1879	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	51	79·54	...	...	...	...	...	...	...	...
1881	...	...	87	76·53	...	...	...	...	...	...	...	...
1882	†	†	114	68·70	...	...	...	...	...	...	...	...
1883	64	136·50	170	48·19	...	...	...	...	...	...	...	...
1884	76	126·31	171	57·82	...	...	...	...	...	...	...	...
1885	82	98·46	183	65·12	...	...	...	...	...	...	...	...
1886	87	102·70	184	62·51	37	104·35	...	...	...	...	...	...
1887	100	101·22	177	59·09	41	116·41	...	...	...	...	...	...
1888	110	77·82	...	...	...	...	164	67·58	...	...	...	...
1889	113	59·85	...	...	...	...	131	80·98	...	...	...	...
1890	103	63·18	...	...	...	...	101	80·89	...	...	...	...
1891	125	59·62	...	...	...	...	129	50·81	...	...	...	...
1892	118	59·33	...	...	...	...	141	50·55	...	...	...	...
1893	121	59·80	...	...	...	...	144	49·17	...	...	68	84·69
1894	126	60·92	...	...	...	...	149	51·30	...	...	98	89·81
1895	146	57·90	...	...	...	...	153	46·49	...	...	90	82·71
1896	144	62·85	...	...	...	...	142	54·03	...	...	94	77·98
1897	175	56·98	...	...	...	...	138	51·94	...	...	100	69·59
1898	158	64·08	...	...	...	...	143	51·10	...	...	94	76·46
1899	158	61·23	...	...	...	...	152	47·96	...	...	104	65·11
1900	185	58·70	...	...	...	...	207	40·56	...	...	143	56·10
1901	194	54·25	...	...	...	...	161	52·88	25	72·13	‡	‡
1902	182	56·43	...	...	...	...	176	51·09	21	77·27	‡	‡

* Converted to 5′ 6″ gauge in 1888.
† Information not available.
‡ Transferred partly to the Madras railway and partly to the Bengal-Nagpur railway.

NOTE.—Earnings per mile per week exclude steam-boat

NOTE.—The length shown against

DIX 6—*contd.*

railways per mile per week

to gross earnings.

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railway has been amalgamated with the system by which it has been worked.

5 OUDH AND ROHILKHAND STATE RAILWAY SYSTEM (1,182·28 MILES.)				6 NORTH WESTERN STATE RAILWAY SYSTEM (3,773·80 MILES).														Railway.
(a) & (c) Oudh and Rohilkhand State, 5′ 6″ and 3′ 3½″. (1,119·24 miles.)		(b) Hardwar-Dehra, 5′ 6″. (32·04 miles.)		(a) & (b) North Western State (3,077·50 miles.)														
				Sind-Punjab and Delhi, 5′ 6″. (692·98 miles.)		Punjab Northern, 5′ 6″. * (446·75 miles.)		Indus Valley and Kandahar, 5′ 6″. (652·48 miles.)		Amritsar-Pathankot, 5′ 6″. (64·79 miles.)		North Western.						
												Commercial section. (2,041·64 miles.)		Military section. (1,035·86 miles.)		Entire line. (3,077·50 miles.)		
Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Calendar year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	58	97·28	...	...	...	...	...	...	...	...	...	...	...	...	1861
...	...	...	...	112	79·59	...	...	...	...	...	...	...	...	...	...	...	...	1862
...	...	...	...	171	83·04	...	...	...	...	...	...	...	...	...	...	...	...	1863
...	...	...	...	170	87·26	...	...	...	...	...	...	...	...	...	...	...	...	1864
...	...	...	...	101	82·18	...	...	...	...	...	...	...	...	...	...	...	...	1865
...	...	...	...	116	76·15	...	...	...	...	...	...	...	...	...	...	...	...	1866
74	106·97	...	...	121	89·98	...	...	...	...	...	...	...	...	...	...	...	...	1867
120	64·54	...	...	112	95·69	...	...	...	...	...	...	...	...	...	...	...	...	1868
97	81·74	...	...	117	80·70	...	...	...	...	...	...	...	...	...	...	...	...	1869
112	227·93	...	...	140	76·16	...	...	...	...	...	...	...	...	...	...	...	...	1870
117	69·31	...	...	122	99·08	...	...	...	...	...	...	...	...	...	...	...	...	1871
56	68·58	...	...	134	85·77	...	...	...	...	...	...	...	...	...	...	...	...	1872
56	72·91	...	...	154	68·67	...	...	...	...	...	...	...	...	...	...	...	...	1873
72	64·41	...	...	191	55·35	...	...	...	...	...	...	...	...	...	...	...	...	1874
97	59·71	...	...	161	64·08	61	63·41	...	...	...	...	...	...	...	...	...	...	1875
120	63·93	...	...	186	67·03	101	77·27	...	...	...	...	...	...	...	...	...	...	1876
153	52·38	...	...	241	57·46	130	86·81	...	...	...	...	...	...	...	...	...	...	1877
163	54·23	...	...	234	64·50	169	99·36	56	122·97	...	...	...	...	...	...	...	...	1878
153	58·11	...	...	317	60·22	345	79·52	121	81·16	...	...	...	...	...	...	...	...	1879
157	57·25	...	...	352	55·92	360	83·25	209	71·15	...	...	...	...	...	...	...	...	1880
173	59·91	...	...	285	69·76	198	89·64	155	78·73	...	...	...	...	...	...	...	...	1881
185	65·77	...	...	285	66·00	151	83·74	141	69·17	...	...	...	...	...	...	...	...	1882
192	54·54	...	...	296	57·13	144	81·11	203	55·55	...	...	...	...	...	...	...	...	1883
182	55·90	...	...	290	61·26	139	72·34	210	49·49	67	85·78	...	...	...	...	...	...	1884
176	65·59	...	...	373	57·35	165	62·69	309	40·85	84	80·28	...	...	...	...	...	...	1885
184	56·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	259	52·71	1886
186	52·83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	182	72·73	1887
197	57·38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	202	67·77	1888
209	44·24	...	...	...	...	...	...	...	...	...	...	294	57·01	90	107·75	226	63·76	1889
205	49·14	...	...	...	...	...	...	...	...	...	...	283	54·48	88	110·72	219	62·82	1890
238	42·29	...	...	...	...	...	...	...	...	...	...	344	55·60	88	122·41	261	62·98	1891
237	41·28	...	...	...	...	...	...	...	...	...	...	280	55·58	70	131·08	208	64·25	1892
239	42·44	...	...	...	...	...	...	...	...	...	...	313	60·29	74	118·83	229	66·53	1893
262	45·47	...	...	...	...	...	...	...	...	...	...	347	53·11	54	122·95	253	60·31	1894
248	48·95	...	...	...	...	...	...	...	...	...	...	379	46·79	77	116·14	274	53·30	1895
209	49·97	...	...	...	...	...	...	...	...	...	...	294	54·77	78	97·72	226	59·63	1896
186	56·59	...	...	...	...	...	...	...	...	...	...	309	49·73	53	93·76	225	54·41	1897
190	46·12	...	...	...	...	...	...	...	...	...	...	401	45·98	67	101·26	255	50·61	1898
208	45·45	...	...	...	...	...	...	...	...	...	...	366	47·73	60	123·43	232	54·32	1899
208	51·44	115	50·00	...	...	...	...	...	...	...	...	275	52·34	60	102·47	201	58·02	1900
231	45·53	128	50·00	...	...	...	...	...	...	...	...	350	45·41	69	101·15	255	50·58	1901
230	51·30	152	54·46	...	...	...	...	...	...	...	...	360	53·63	67	112·42	262	58·62	1902

* This line which was originally constructed on the 3′ 3½″ gauge was converted to 5′ 6″ gauge in 1878.

and proportion of expenses to earnings includes steam-boat.
each railway system, represents open mileage on the 31st December 1902.

P. T. O.

Appendix 6.
Weekly earnings.

Gross earnings (average) of individua
ana
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

6
NORTH WESTERN STATE RAILWAY SYSTEM (3,773·80 MILES).

Railway.	(b) Southern Punjab, 5′ 6″. (324·72 miles.)		(c) Rajpura-Bhatinda, 5′ 6″. (107·05 miles.)		Hyderabad-Shadipalli, 5′ 6″. (55·33 miles).		(d) Jammu and Kashmir (Native state section) 5′ 6″. (15·92 miles).		(e) Ludhiana-Dhuri-Jakhal, 5′ 6″. (78 66 miles.)		(f) Khushalgarh-Kohat-Thal, 2′ 6″. (29·70 miles).		(g) Nowshera-Durgai, 2′ 6″. (40·25 miles.)	
Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1871	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1872	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1876	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1877	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1878	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	17	109·72	...	...	...	...	...	...	...	...	...	...
1885	...	...	59	106·09	...	...	...	...	...	...	...	...	...	...
1886	...	...	79	78·62	...	...	...	...	...	...	...	...	...	...
1887	...	...	†	†	...	...	...	...	...	...	...	...	...	...
1888	...	...	†	†	...	...	...	...	...	...	...	...	...	...
1889	...	...	74	55·00	...	...	...	...	...	...	...	...	...	...
1890	...	...	101	53·00	...	...	‡	‡	...	...	...	...	...	...
1891	...	...	128	55·00	...	...	‡	‡	...	...	...	...	...	...
1892	...	...	100	55·00	29	105·87	‡	‡	...	...	...	...	...	...
1893	...	...	122	55·00	43	87·41	‡	‡	...	...	...	...	...	...
1894	...	...	224	55·00	47	75·17	‡	‡	...	...	...	...	...	...
1895	...	...	235	55·00	55	72·28	‡	‡	...	...	...	...	...	...
1896	...	...	178	55·00	61	65·67	‡	†	...	...	...	...	...	...
1897	35	52·00	124	55·00	67	71·04	‡	†	...	...	...	...	...	...
1898	67	52·00	125	55·00	73	68·49	58	55·50	...	...	...	...	...	...
1899	63	52·00	122	55·00	74	60·73	62	55·50	...	...	...	...	...	...
1900	74	52·00	125	55·00	65	65·93	67	55·50	...	...	...	...	...	...
1901	135	51·91	155	55·00	‡	‡	63	55·50	68	55·00	...	...	...	...
1902	90	52·00	151	55·00	...	...	63	55·50	99	55·00	19	66·44	51	151·11

† Included with the North Western State railway.
‡ Transferred to the Jodhpur-Bikaner railway from the 1st January 1901.

Note.—Earnings per mile per week exclude steam-boat
Note.—The length shown against

DIX 6—*contd.*

railways per mile per week

to gross earnings.

II of Report.)

railway has been amalgamated with the system by which it has been worked.

7

GREAT INDIAN PENINSULA RAILWAY SYSTEM. (2,800·59 MILES.)

(a) Great Indian Peninsula, 5′ 6″. (1,348·89 miles.)		Dhond-Manmad, 5′ 6″. (144·50 miles.)		Wardha Coal, 5′ 6″. (44·88 miles.)		(b) Khamgaon, 5′ 6″. (7·97 miles.)		(c) Amraoti, 5′ 6″. (5·49 miles.)		(d) INDIAN MIDLAND. Sindia, 5′ 6″. (74·88 miles.)		Indian Midland, 5′ 6″ (796·53 miles)		(e) Bina-Goona-Baran, 5′ 6″. (145·63 miles.)		(f) Bhopal-Ujain, 5′ 6″. (113·27 miles)		(g) BHOPAL-ITARSI (87·39 miles) British section, 5′ 6″. (13·11 miles.)		Native-state section, 5′ 6″. (44·28 miles.)		(h) Gwalior Light, 2′ 0″. (126·14 miles.)		Railway.
Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
119	45·90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
88	60·81	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
89	70·21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
113	42·17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
158	45·27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
173	42·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
172	51·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
144	60·97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
139	76·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
149	62·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
175	67 55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
119	72·07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
414	59·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	1865
357	58·07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
308	55·69	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
357	61·80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
348	67·79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	1869
300	62·25	...	...	...	...	31	186·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
307	63·03	...	...	...	...	56	88·90	70	73·13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
284	64·25	...	...	...	...	31	69·63	74	88·03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
284	64·99	...		...	...	81	88·69	77	115·01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
303	59·17	...	...	23	104·95	127	52·64	101	96·26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
324	47·28	...	...	31	106·68	174	68·55	186	77·51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
369	47·60	...	...	23	116·94	132	72·43	212	41·55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
492	48·30	...	...	67	70·25	154	61·72	257	34·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1877
429	48·91	24	131·01	54	93·84	191	46·65	286	43·74	54	133·30	...	...	...	...	...	...	...	...	...	...	...	...	1878
383	59·64	62	105·92	69	81·64	146	100·69	224	76·86	39	134·95	...	...	...	...	...	...	...	...	...	...	...	...	1879
372	55·49	91	87·31	65	152·90	98	84·44	163	92·85	58	88·05	...	...	...	...	...	...	...	...	...	...	...	...	1880
426	49·40	*	*	197	104·35	*	*	*	*	81	77·35	...	...	...	...	...	...	...	...	...	...	...	...	1881
470	48·00	*	*	255	76·80	*	*	*	*	85	71·99	...	...	...	...	...	...	70†	81·90†	...	...	...	...	1882
466	48·67	109	76·65	120	59·80	151	64·14	308	53·84	87	52·82	...	...	...	...	...	...	43†	135·72†	...	...	...	...	1883
502	52·31	116	76·77	121	64·80	113	72·16	246	55·49	95	53·14	...	...	...	...	...	...	40†	104·13†	...	...	...	...	1884
467	50·46	...	...	108	80·66	...	...	...	...	101	49·33	...	...	...	...	...	...	*	*	*	*	...	...	1885
503	46·49	...	...	114	92·23	...	...	...	...	101	49·69	56	82·03	...	...	...	...	*	*	*	*	...	...	1886
511	46·84	...	...	125	80·76	...	...	...	...	117	46·62	84	80·63	...	...	...	...	*	*	*	*	...	...	1887
526	46·96	...	...	135	74·21	...	...	...	...	95	47·74	99	72·53	...	...	...	...	*	*	*	*	...	...	1888
494	51·42	...	...	142	51·24	...	...	...	...	...	...	92	77·32	...	...	...	...	117	106·85	117	106·85	...	...	1889
508	49·80	...	...	140	63·46	...	...	...	...	...	...	86	80·80	...	...	...	...	130	118·88	130	118·88	...	...	1890
584	48·25	...	...	...	...	...	...	...	...	...	...	115	67·51	...	...	...	...	200	62·50	199	62·50	...	...	1891
525	49·93	...	...	...	...	...	...	...	...	...	...	124	61·45	...	...	...	...	226	63·16	195	62·96	...	...	1892
501	53·57	...	...	...	...	...	..	...	...	...	...	123	61·87	...	...	...	...	251	69·17	185	69·17	...	...	1893
468	55·18	...	...	...	...	...	...	...	...	...	...	144	57·83	...	...	...	...	237	61·98	166	61·97	...	...	1894
436	56·38	...	...	...	...	...	...	...	...	...	...	124	63·36	19	54·42	2	50·00	209	67·68	138	67·67	...	...	1895
444	55·20	...	...	...	...	...	...	...	...	...	...	134	58·41	24	59·60	63	51·17	241	61·75	157	61·63	...	...	1896
367	66·96	...	...	...	...	...	...	...	...	...	...	150	56·16	27	57·57	63	50·40	223	59·84	144	59·84	...	...	1897
450	59·49	...	...	...	...	...	...	...	...	...	...	147	55·35	35	55·36	71	50·82	284	58·81	181	58·90	...	...	1898
462	55·76	...	...	...	...	...	...	...	...	...	...	152	57·03	43	52·83	99	52·28	307	59·89	194	59·88	6	258·32	1899
439	52·49	...	...	...	...	...	...	...	...	...	...	213	46·23	57	49·29	161	50·79	375	50·12	232	50·06	13	100·16	1900
518	48·03	...	...	...	...	120	52·74	365	53·73	...	...	199	48·43	33	51·34	93	52·00	430	0·75	254	50·64	13	100·63	1901
523	50·18	...	...	...	...	120	52·35	468	53·88	...	...	209	50·43	32	52·71	99	52·36	518	51·51	274	49·74	17	91·47	1902

* Included with the Great Indian Peninsula railway.

† Represent earnings and expenses of both sections of the Bhopal-Itarsi railway.

and proportion of expenses to earnings includes steam-boat,

each railway system, represents open mileage on the 31st December 1902,

P. T. O.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N. B.—When figures cease to be shown under any railway it is to be understood that such

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BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM. (2,782·62 MILES.)

Railway.	(a) Bombay, Baroda and Central India, 5′ 6″. (*460·68 miles.)		(b) Tapti Valley, 5′ 6″. (155·48 miles.)		Gaekwar's Petlad, 5′ 6″. (13·35 miles.)		(c) Nagda-Ujjain, 5′ 6″. (34·32 miles.)		(d) Petlad-Cambay (Anand-Tarapur section). 5′ 6″ (21·50 miles.)		(e) Petlad-Cambay (Tarapur-Cambay section), 5′ 6″. (10·02 miles.)		(f) Godhra-Rutlam-Nagda, 5′ 6″. (141·14 miles.)		(g) Rajputana-Malwa. (1,648·36 miles.)					
															Rajputana-Malwa, 3′ 3½″. (1,648·36 miles.)		Holkar and Sindia-Neemuch, 3′ 3½″. (289·00 miles.)		Western Rajputana, 3′ 3½″. (82·63 miles.)	
Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	49	70·17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	73	54·97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1862	94	50·14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1863	138	49·51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1864	156	85·33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1865	223	63·83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	278	71·93	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	291	66·56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1868	287	73·66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1869	307	74·32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1870	327	60·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1871	300	59·98	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1872	290	59·97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	260	59·23	...	...	...	...	...	...	...	...	...	...	...	...	32	56·59	...	...	...	...
1874	265	52·12	...	...	...	...	...	...	...	...	...	...	...	...	69	80·37	60	84·02	...	...
1875	285	54·41	...	...	...	...	...	...	...	...	...	...	...	...	98	64·04	123	91·71	...	...
1876	296	54·74	...	...	...	...	...	...	...	...	...	...	...	...	114	65·49	99	92·87	...	...
1877	345	41·97	...	...	...	...	...	...	...	...	...	...	...	...	130	67·99	86	76·86	...	...
1878	298	46·61	...	...	...	...	...	...	...	...	...	...	...	...	136	61·97	122	67·50	...	...
1879	309	46·97	...	...	...	...	...	...	...	...	...	...	...	...	153	66·74	128	74·53	86	86·08
1880	355	42·57	...	...	...	...	...	...	...	...	...	...	...	...	152	66·88	118	74·74	151	85·79
1881	423	41·04	...	...	...	...	...	...	...	...	...	...	...	...	189	60·41	132	69·11	...	...
1882	427	50·76	...	...	...	...	...	...	...	...	...	...	...	...	188	53·07	...	...	...	...
1883	497	43·10	...	...	...	...	...	...	...	...	...	...	...	...	219	52·18	...	...	...	...
1884	509	42·95	...	...	...	...	...	...	...	...	...	...	...	...	223	56·92	...	...	...	...
1885	548	43·11	...	...	...	...	...	...	...	...	...	...	...	...	224	52·81	...	...	...	...
1886	564	41·12	...	...	...	...	...	...	...	...	...	...	...	...	212	50·27	...	...	...	...
1887	508	41·89	...	...	...	...	...	...	...	...	...	...	...	...	191	50·84	...	...	...	...
1888	532	44·11	...	...	...	...	...	...	...	...	...	...	...	...	215	48·26	...	...	...	...
1889	552	42·44	...	...	...	...	...	...	...	...	...	...	...	...	230	45·82	...	...	...	...
1890	540	42·06	...	...	71	36·08	...	...	...	...	...	...	...	...	200	50·41	...	...	...	...
1891	590	41·23	...	...	85	38·51	...	...	...	...	...	...	...	...	251	43·47	...	...	...	...
1892	594	42·92	...	...	88	43·25	...	...	...	...	...	...	...	...	257	41·01	...	...	...	...
1893	630	36·55	...	...	92	36·47	...	...	...	...	...	...	50	41·61	259	41·12	...	...	...	...
1894	665	36·85	...	...	100	36·79	...	...	...	...	...	...	106	40·64	285	38·19	...	...	...	...
1895	732	37·69	...	...	106	36·96	...	...	...	...	...	...	184	57·01	269	40·29	...	...	...	...
1896	676	45·07	...	...	169	29·52	49	56·36	...	...	...	...	189	62·27	227	44·35	...	...	...	...
1897	595	54·63	...	...	93	47·56	58	54·36	...	...	...	...	146	72·02	212	46·60	...	...	...	...
1898	662	44·89	18	48·70	74	44·92	73	44·83	...	...	...	...	181	51·14	241	42·83	...	...	...	...
1899	729	46·81	71	47·40	102	44·37	83	47·18	...	...	...	...	172	58·34	285	42·06	...	...	...	...
1900	734	52·50	84	44·00	127	52·86	141	51·96	...	...	...	...	219	46·84	317	43·18	...	...	...	...
1901	665	44·06	74	43·01	...	...	63	40·19	101	44·47	40	50·46	156	45·15	313	46·29	...	...	...	...
1902	659	49·90	102	43·95	...	...	88	45·39	95	46·37	45	46·57	140	46·27	291	47·54	...	...	...	...

* Including Veramgam-Wadhwan section, 39·23 miles, converted to metre gauge on the 14th December 1902.

NOTE.—Earnings per mile per week exclude steam-boat

NOTE.—The length shown against each railway system,

DIX 6—*contd.*

railways per mile per week

to gross earnings.

II of Report.)

railway has been amalgamated with the system by which it has been worked

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BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*
(2,782·62 MILES).

(*g*) RAJPUTANA-MALWA—*concld.* (1,648·36 MILES).										(*h*) Gaekwar's Mehsana, 3′ 3⅜″. (92·63 miles.)		(*i*) Ahmedabad-Parantij, 3′ 3⅜″. (54·70 miles.)		(*j*) Vijapur-Kalol Kadi, 3′ 3⅜″ (29·44 miles.)		Railway.
Rewari-Ferozepore, 3′ 3⅜″. (240·73 miles.)		Muttra-Hathras, 3′ 3⅜″. (29·00 miles.)		Cawnpore-Farukhabad, 3′ 3⅜″. (86·50 miles.)		Muttra-Achnera, 3′ 3⅜″. (22·73 miles.)		Cawnpore-Achnera, 3′ 3⅜″. (253·23 miles.)								
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Calendar Year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
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...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	1865
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
...	...	108	58·18	...	...	...	...	...	...	...	...	...	...	...	...	1875
...	...	55	57·74	...	...	...	...	...	...	...	...	...	...	...	...	1876
...	...	66	54·86	...	...	...	...	...	...	...	...	...	...	...	...	1877
...	...	65	53·33	...	...	...	...	...	...	...	...	...	...	...	...	1878
...	...	83	54·97	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	89	57·35	18	233·15	...	...	...	...	...	...	...	...	...	...	1880
...	...	90	69·19	65	69·76	39	89·01	...	...	...	...	...	...	...	...	1881
...	...	84	76·97	80	67·36	57	86·42	...	...	...	...	...	...	...	...	1882
75	81·28	...	...	...	...	...	...	*80	63·98	...	...	...	...	...	...	1883
96	67·28	...	...	...	...	...	...	81	69·17	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	70	87·87	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	33	80·05	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	43	64·90	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	37	61·82	...	...	..	...	1889
...	...	...	...	...	...	...	...	...	...	41	60 66	...	...	...	...	1890
...	...	...	...	...	...	...	...	...	...	49	45·53	...	...	...	...	1891
...	...	...	...	...	...	...	...	...	...	54	40·92	...	..	...	...	1892
...	...	...	...	...	...	...	...	...	...	70	41·12	...	...	...	...	1893
...	...	...	...	...	...	...	...	...	...	79	37·79	...	...	...	...	1894
...	...	...	...	...	...	...	...	...	...	70	40 18	...	...	...	...	1895
...	...	...	...	...	...	...	...	...	...	88	35 91	...	...	...	...	1896
...	...	...	...	...	...	...	...	...	...	70	46·58	46	46 92	...	...	1897
...	...	...	...	...	...	...	...	...	...	72	42·55	33	42·70	...	...	1898
...	...	...	...	...	...	...	...	...	...	79	42·40	74	42·23	...	...	1899
...	...	...	...	...	...	...	...	...	...	89	44·75	93	41·17	...	...	1900
...	...	...	...	...	...	...	...	...	...	81	45·16	62	44·00	...	...	1901
...	...	...	...	...	...	...	...	...	...	78	46·87	63	44 00	23	52·72	1902

* Includes the Muttra-Hathras, Cawnpore-Farukhabad and Muttra-Achnera railways.

and proportion of expenses to earnings includes steam-boat,
represents open mileage on the 31st December 1902.

P. T. O.

Appendix 6.
Weekly earnings.

APPEN

s earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

Railway.	8 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.* (2,782·61 MILES)						9 NIZAM'S GUARANTEED STATE RAILWAY SYSTEM. (742·13 MILES.)				10 MADRAS RAILWAY SYSTEM. (1,476·82 MILES.)							
	(*k*) Palanpur-Deesa, 3′ 3½″. (17·28 miles.)		(*l*) Gaekwar's Dabhoi, 2′ 6″. (78·80 miles.)		(*m*) Rajpipla, 2′ 6″. (37·37 miles.)		(*a*) & (*b*) Nizam's Guaranteed State, 5′ 6″. (380·71 miles.)		(*c*) Hyderabad-Godavari Valley, 3′ 3½″. (391·42 miles.)		(*a*) and (*b*) Madras, 5′ 6″. (1,385·29* miles.)		(*c*) Kolar Gold-fields, 5′ 6″. (9·88 miles.)		(*d*) Shoranur-Cochin, 3′ 3½″. (64·75 miles.)		(*e*) Nilgiri, 3′ 3½″. (16·90 miles.)	
Calendar Year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	75	51·66	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	91	47·13	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	93	55·53	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	122	60·35	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	117	73·50	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	91	71·98	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	84	74·02	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	110	68·57	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	133	49·62	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	145	45·69	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	147	45·62	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	153	43·47	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	181	41·48	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	171	49·16	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	146	52·84	...	...	...	...	...	...
1871	...	...	...	...	...	...	...	...	...	...	139	51·27	...	...	...	...	...	...
1872	...	...	...	...	...	...	...	...	...	...	143	52·19	...	...	...	...	...	...
1873	...	...	21	98·34	...	...	...	...	...	...	157	56·94	...	...	...	...	...	...
1874	...	...	32	75·78	...	...	79	95·01	...	...	132	64·67	...	...	...	...	...	...
1875	...	...	33	78·11	...	...	79	113·57	...	...	144	70·28	...	...	...	...	...	...
1876	...	...	38	75·35	...	...	92	85·72	...	...	159	64·38	...	...	...	...	...	...
1877	...	...	45	78·20	...	...	132	77·58	...	...	225	59·26	...	...	...	...	...	...
1878	...	...	43	62·42	...	...	126	85·87	...	...	148	76·05	...	...	...	...	...	...
1879	...	...	46	56·15	...	...	110	87·01	...	...	148	68·68	...	...	...	...	...	...
1880	...	...	51	49·44	...	...	112	68·08	...	...	138	68·24	...	...	...	...	...	...
1881	...	...	46	65·41	...	...	120	61·32	...	...	141	67·11	...	...	...	...	...	...
1882	...	...	47	67·54	...	...	141	56·35	...	...	155	62·84	...	...	...	...	...	...
1883	...	...	48	73·75	...	...	137	72·12	...	...	148	61·99	...	...	...	...	...	...
1884	...	...	49	67·43	...	...	155	63·02	...	...	160	58·89	...	...	...	...	...	...
1885	...	...	50	63·47	...	...	178	56·26	...	...	171	57·18	...	...	...	...	...	...
1886	...	...	50	74·37	...	...	143	49·71	...	...	178	59·46	...	...	...	...	...	...
1887	...	...	51	69·73	...	...	143	64·31	...	...	189	64·76	...	...	...	...	...	...
1888	...	...	48	69·91	...	...	118	57·35	...	...	195	58·72	...	...	...	...	...	...
1889	...	...	47	65·45	...	...	129	66·90	...	...	209	58·97	...	...	...	...	...	...
1890	...	...	57	61·76	...	...	140	59·74	...	...	218	52·44	...	...	...	...	...	...
1891	...	...	54	66·13	...	...	151	54·70	...	...	214	58·20	...	...	...	...	...	...
1892	...	...	64	55·36	...	...	151	52·35	...	...	221	55·40	...	...	...	...	...	...
1893	33	44·87	68	47·44	...	...	136	53·08	...	...	241	48·39	...	...	...	...	...	...
1894	42	38·35	65	60·29	...	...	177	50·20	...	...	237	52·96	249	61·37	...	...	...	...
1895	42	40·17	63	58·73	...	...	185	53·77	...	...	257	47·55	294	56·60	...	...	...	...
1896	57	43·50	69	51·44	...	...	187	50·02	...	...	249	50·50	299	59·25	...	...	...	...
1897	48	46·55	56	76·94	11	214·53	205	48·67	...	...	263	47·65	402	56·77	...	...	...	...
1898	43	42·50	51	112·65	11	186·33	221	44·20	...	...	246	49·51	392	59·82	...	...	...	...
1899	56	42·37	60	64·40	22	76·32	240	43·45	48	41·82	240	52·43	342	68·01	...	...	175	76·06
1900	53	43·66	57	73·82	25	75·46	286	41·52	70	60·41	254	51·75	402	67·88	...	...	200	42·83
1901	41	45·87	62	71·08	24	77·77	236	35·59	99	54·07	229	51·31	421	57·79	...	...	275	42·87
1902	37	47·01	54	65·69	20	73·84	254	39·89	112	57·70	229	54·78	422	60·83	69	45·64	352	63·73

* Includes 2·97 miles (3′ 3½″ gauge) worked over by the Southern Mahratta railway.

Note.—Earnings per mile per week exclude steam-boat
Note.—The length shown against each railway system

DIX 6—*contd.*

Appendix 6.
Weekly earnings.

railways per mile per week

to gross earnings.

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railway has been amalgamated with the system by which it has been worked.

12 BENGAL DOOARS. (114·16 MILES.)				13 DIBRU-SADIYA. (88·50 MILES.)				14 ASSAM-BENGAL, 3′ 3⅜″. (589·21 MILES.)		15 DEOGHUR, 3′ 3⅜″. (4·79 MILES.)		Railway.
(*a*) Bengal Dooars. 3′ 3⅜″. (36·40 miles.)		(*b*) Bengal Dooars extensions. 3′ 3⅜″. (77·76 miles.)		(*a*) Dibru-Sadiya, 3′ 3⅜″. (77·50 miles.)		(*b*) Ledo and Tirak-Margherita Colliery, 3′ 3⅜″. (11·00 miles.)						
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Calendar year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	1853
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...	...	...	...	52	171·70	...	...	...	...	79	68·00	1883
...	...	...	...	67	131·61	...	...	...	...	83	54·90	1884
...	...	...	...	62	123·03	...	...	...	...	88	58·69	1885
...	...	...	...	81	80·65	...	...	...	...	100	53·06	1886
...	...	...	...	94	74·68	...	...	...	...	98	50·64	1887
...	...	...	...	105	76·09	...	...	...	...	104	55·37	1888
...	...	...	...	114	72·26	...	...	...	...	115	55·51	1889
...	...	...	...	127	65·59	...	...	...	...	105	58·17	1890
...	...	...	...	123	65·80	...	...	...	...	125	50·49	1891
...	...	...	...	127	68·10	...	...	...	...	108	64·00	1892
69	49·80	...	...	127	70·13	...	...	...	...	152	49·47	1893
109	49·20	...	...	132	63·18	...	...	...	...	118	67·17	1894
125	49·73	...	...	149	55·16	...	...	64	103·75	130	54·46	1895
136	51·26	...	...	161	51·76	...	...	71	94·63	120	61·69	1896
145	49·27	...	...	192	68·12	88	82·51	63	92·71	122	63·22	1897
135	57·40	...	...	194	63·85	142	93·22	86	95·83	129	79·44	1898
137	55·41	...	...	213	47·08	162	65·04	75	80·08	134	79·92	1899
168	43·06	13	72·31	224	48·67	169	72·64	75	78·69	140	78·87	1900
156	43·27	47	69·92	230	49·03	123	84·15	70	78·60	232	61·45	1901
144	37·27	62	65·99	211	51·73	102	99·25	136	87·86	120	79·75	1902

and proportion of expenses to earnings includes steam-boat.
represents open mileage on the 31st December 1902.

P.T.O.

Appendix 6.
Weekly earnings.

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

Railway.	16 BENGAL AND NORTH-WESTERN RAILWAY SYSTEM. (1,282·73 MILES.)						17 ROHILKUND AND KUMAON RAILWAY SYSTEM. (324·50 MILES.)										JODHPUR.	
	(a) Bengal and North-Western, 3′ 3⅜″. (747·75 miles.)		(b) Tirhoot, 3′ 3⅜″. (516·89 miles.)		(c) Saganli-Raxaul, 3′ 3⅜″. (18·09 miles.)		(a) Rohilkund and Kumaon, 3′ 3⅜″. (53·92 miles.)		(b) Lucknow-Bareilly. (231·17 miles.) Bareilly-Pilibhit, 3′ 3⅜″. (36·00 miles.)		Lucknow-Sitapur-Seramau, 3′ 3⅜″. (104·59 miles.)		Lucknow-Bareilly, 3′ 3⅜″. (231·17 miles.)		(c) Powayan Light, 2′ 6″ (39·50 miles.)		(a) Jodhpur section, 3′ 3⅜″. (454·94 miles.)	
Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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1872	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	...	...	39	107·62	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1876	...	...	71	68·67	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1877	...	...	77	69·85	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1878	...	...	108	75·34	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1879	...	...	113	76·49	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	102	56·40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	119	59·57	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	136	61·50	...	...	...	...	...	...	...	...	...	...	...	...	*	*
1883	...	...	103	70·90	...	...	...	...	...	...	...	...	...	...	...	...	42	42·74
1884	29	133·76	105	77·60	...	...	51	95·16	32	91·81	...	...	...	...	...	...	39	50·59
1885	72	49·32	98	71·90	...	...	68	66·40	44	83·79	...	...	...	...	...	...	54	34·30
1886	106	56·36	109	66·56	...	...	86	58·75	53	77·46	45	76·29	...	...	...	...	62	35·20
1887	90	56·94	122	59·62	...	...	92	63·42	52	71·47	46	73·49	...	...	...	...	55	39·86
1888	102	55·25	123	55·80	...	...	96	57·46	50	70·31	47	70·81	...	...	...	...	56	46·91
1889	103	52·35	122	48·42	...	...	107	56·98	59	66·45	59	65·19	...	...	...	...	56	46·50
1890	121	41·08	...	...	...	...	90	52·04	64	66·08	62	72·78	...	...	...	...	58	47·09
1891	121	40·04	...	...	...	...	112	58·22	...	...	...	...	56	65·05	...	...	66	45·44
1892	120	41·12	...	...	...	...	127	54·17	...	...	...	...	66	59·72	...	...	74	44·14
1893	123	43·20	...	...	...	...	124	56·78	...	...	...	...	67	62·29	...	...	52	47·83
1894	130	41·79	...	...	...	...	131	52·91	...	...	...	...	87	59·25	...	...	65	38·09
1895	133	42·45	...	...	...	...	118	62·18	...	...	...	...	74	61·90	...	...	58	41·60
1896	134	43·97	...	...	...	...	125	63·79	...	...	...	...	75	63·32	...	...	70	36·60
1897	128	43·78	...	...	...	...	124	59·33	...	...	...	...	69	59·42	...	...	67	33·66
1898	129	43·37	...	...	...	...	135	52·24	...	...	...	...	94	51·62	...	...	73	42·22
1899	131	46·67	...	...	30	40·00	136	49·74	...	...	...	...	114	50·21	...	...	102	38·88
1900	128	49·56	...	...	30	52·62	156	48·64	...	...	...	...	107	48·72	...	...	81	44·27
1901	140	44·51	...	...	40	63·44	112	45·38	...	...	...	...	123	44·76	33	70·00	66	54·39
1902	134	46·32	...	...	42	52·57	146	46·83	...	...	...	...	132	47·05	37	70·24	71	50·17

Note.—Earnings per mile per week exclude steam-boat

Note.—The length shown against

DIX 6—*contd.*

railways per mile per week

to gross earnings.

11 of Report.)

railway has been amalgamated with the system by which it has been worked.

18 BIKANER RAILWAY SYSTEM. (824·27 MILES.)				19 UDAIPUR CHITOR, 3′ 3⅜″. (67·30 MILES.)		20 BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM. (455·43 MILES.)								21 SOUTHERN MAHRATTA RAILWAY SYSTEM. (1,643·21 MILES.)						Railway.
(b) Bikaner section, 3′ 3⅜″. (345·35 miles.)		(c) Jodhpur-Hyderabad (British section), 3′ 3⅜″. (123·98 miles.)				(a) Bhavnagar-Gondal-Junagad-Porbandar, 3′ 3⅜″. (334·19 miles.)		(b) Jamnagar, 3′ 3⅜″. (54·24 miles.)		(c) Jetalsar-Rajkot, 3′ 3⅜″. (45·21 miles.)		Dhrangadra, 3′ 3⅜″. (20·83 miles.)		(a) Southern Mahratta, 3′ 3⅜″. (1,042·04 miles.)		(b) Mysore section. 3′ 3⅜″. (296·22 miles.)		(c) Guntakul-Mysore frontier, 3′ 3⅜″. (119·50 miles.)		
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Calendar year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
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...	...	...	...	...	...	109	54·46	...	...	...	...	...	...	50	108·51	67	54·22	...	...	1884
...	...	...	...	...	...	98	59·55	...	...	...	...	...	...	63	83·80	60	52·12	...	...	1885
...	...	...	...	...	...	96	57·00	...	...	...	...	...	...	92	69·83	65	59·04	...	...	1886
...	...	...	...	...	...	98	54·93	...	...	...	...	...	...	87	66·01	71	71·69	...	...	1887
...	...	...	...	...	...	109	50·58	...	...	...	...	...	...	86	75·70	79	76·28	...	...	1888
...	...	...	...	...	...	97	56·55	...	...	...	...	...	...	88	76·15	72	75·23	...	...	1889
...	...	...	...	...	...	91	61·81	...	...	...	...	...	...	85	78·19	77	77·94	...	...	1890
36	46·99	...	...	...	...	85	67·79	...	...	...	...	...	...	88	65·76	86	66·50	...	...	1891
34	67·47	...	...	...	...	91	72·25	...	...	...	...	...	...	82	68 69	89	67·92	*	*	1892
30	61·43	...	...	...	...	119	55·92	...	...	59	50·59	...	...	106	59·60	109	59·92	38	60·00	1893
35	49·61	...	...	...	...	106	49·61	...	...	65	60·68	...	...	108	65·44	94	66 99	59	65·34	1894
38	47·89	...	...	42	65·67	113	57·93	...	...	76	57·76	...	...	119	59·65	103	59·72	71	58·65	1895
53	37·56	...	...	43	60·25	114	50·06	...	...	82	57·26	...	...	124	56·59	103	57·29	77	56·20	1896
52	44·02	...	...	39	65·19	105	55·04	41	65·73	85	58·72	...	...	119	56·96	122	57·54	103	56·76	1897
31	43·54	...	...	46	57·33	97	58·22	36	63·12	74	57·50	37	54·62	93	70·32	90	70·32	69	68·88	1898
37	40·22	...	...	62	50·21	107	49·99	83	59·20	45	60·43	59	67·16	108	67·72	69	68·97	62	66·62	1899
43	45·43	13	57·45	91	41·59	113	48·27	53	60·09	84	57·47	53	66·91	119	64·69	89	65·77	70	63·81	1900
30	57·18	66	59·09	63	57·63	89	55·76	48	62·29	73	61·87	43	74·53	107	70·30	93	71·55	72	69·45	1901
30	55·72	78	56·59	62	55·32	79	58·72	46	59·00	60	62·25	35	78 60	119	64·24	104	65·06	75	63 22	1902

* Information not available.

and proportion of expenses to earnings includes steam-boat.
each railway system, represents open mileage on the 31st December 1902.

P. T. O.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses
(Referred to in paragraph

N.B.— When figures cease to be shown under any railway it is to be understood that such

Railway.	21 SOUTHERN MAHRATTA RAILWAY SYSTEM-*concld.* (1,643·21 MILES).										22 SOUTH INDIAN RAILWAY SYSTEM. (1,235·79 MILES.)								23 BURMA, 3′ 3⅜″. (1,260·50 MILES.)	
	(*d*) Hindupur (Yesvantpur-Mysore frontier), 3′ 3⅜″. (51·35 miles.)		(*e*) Birur-Shimoga, 3′ 3⅜″. (37·92 miles.)		(*f*) Kolhapur, 3′ 3⅜″. (29·27 miles.)		(*g*) Mysore-Nanjangud, 3′ 3⅜″. (15·80 miles.)		(*h*) West of India Portuguese 3′ 3⅜″. (52·21 miles.)		(*a*) and (*e*) South Indian, 3′ 3⅜″. (1,130·98 miles.)		(*b*) Tanjore District Board. (Mayavaram-Mutupet), 3′ 3⅜″. (71·21 miles.)		(*c*) Tinnevelly-Quilon (Travancore) (British section), 3′ 3⅜″. (19·95 miles.)		(*d*) Karaikkal-Peralam, 3′ 3⅜″. (14·65 miles.)			
Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	77	47·45	...	...	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	61	44·43	...	...	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	74	44·60	...	...	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	69	57·55	...	...	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	79	49·53	...	...	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	106	49·28	...	...	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	86	49·66	...	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	90	48·64	...	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	84	64·44	...	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	84	62·40	...	...	...	...	...	...	...	...
1871	...	...	...	...	...	...	...	...	...	...	84	53·61	...	...	...	...	...	...	...	...
1872	...	...	...	...	...	...	...	...	...	...	87	56·87	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	...	...	120	49·99	...	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...	...	...	...	101	60·81	...	...	...	...	...	...	...	...
1875	...	...	...	...	...	...	...	...	...	...	96	48·16	...	...	...	...	...	...	...	...
1876	...	...	...	...	...	...	...	...	...	...	90	53·27	...	...	...	...	...	...	...	...
1877	...	...	...	...	...	...	...	...	...	...	107	50·88	...	...	...	...	...	...	61	129·36
1878	...	...	...	...	...	...	...	...	...	...	102	66·65	...	...	...	...	...	...	115	93·03
1879	...	...	...	...	...	...	...	...	...	...	105	68·38	...	...	...	...	...	...	114	85·17
1880	...	...	...	...	...	...	...	...	...	...	106	73·87	...	...	...	...	...	...	158	60·60
1881	...	...	...	...	...	...	...	...	...	...	109	67·04	...	...	...	...	...	...	184	58·21
1882	...	...	...	...	...	...	...	...	...	...	109	62·69	...	...	...	...	...	...	188	59·99
1883	...	...	...	...	...	...	...	...	...	...	112	65·83	...	...	...	...	...	...	187	64·66
1884	...	...	...	...	...	...	...	...	...	...	122	64·18	...	...	...	...	...	...	181	60·96
1885	...	...	...	...	...	...	...	...	...	...	132	65·12	...	...	...	...	...	...	143	78·13
1886	...	...	...	...	...	...	...	...	...	...	143	69·78	...	...	...	...	...	...	156	64·51
1887	...	...	...	...	...	...	...	...	*	*	148	68·20	...	...	...	...	...	...	192	53·12
1888	...	...	...	...	...	...	...	...	*	*	159	68·98	...	...	...	...	...	...	171	62·33
1889	...	...	...	...	...	...	...	...	185	*	167	70·11	...	...	...	...	...	...	169	66·45
1890	...	...	...	...	...	...	...	...	138	74·24	181	57·50	...	...	...	...	...	...	210	57·08
1891	...	...	...	...	60	64·26	...	...	157	86·01	154	65·47	...	...	...	...	...	...	199	59·50
1892	...	61·74	...	...	55	67·72	...	62·60	109	106·01	137	63·01	...	...	...	...	...	...	237	52·31
1893	38	60·60	...	...	78	57·67	43	58·59	168	78·13	149	61·25	...	...	...	...	...	...	178	66·64
1894	61	65·06	...	...	82	64·64	47	65·65	137	86·47	148	58·99	103	61·50	...	...	...	...	164	63·05
1895	72	58·43	...	...	80	57·90	49	57·98	167	90·75	165	56·13	86	61·30	...	...	...	...	169	59·73
1896	84	55·50	...	...	80	55·36	50	56·45	90	137·34	165	54·89	88	59·90	...	...	...	...	167	60·76
1897	101	56·09	...	...	63	55·64	42	57·41	55	189·46	170	53·01	95	58·16	...	...	...	...	188	55·25
1898	67	68·66	...	...	52	69·08	40	67·85	65	173·60	157	54·50	88	68·47	...	...	27	60·19	184	57·87
1899	56	66·17	37	69·59	66	65·74	21	66·26	157	83·15	159	52·41	86	60·01	...	...	37	67·36	179	59·45
1900	70	64·32	34	63·43	82	63·87	38	63·20	96	120·04	166	50·27	83	32·02	...	...	32	61·48	195	55·62
1901	74	69·30	31	72·62	75	68·67	35	72·22	205	113·20	188	46·17	103	53·29	...	...	40	56·28	197	58·02
1902	80	63·51	33	63·83	81	62·55	36	63·38	133	85·51	189	45·60	103	52·48	81	44·84	43	55·34	203	57·83

* Information not available.

NOTE.—Earnings per mile per week exclude steam-boat

NOTE.—The length shown against each railway system,

DIX 6—*concld.*

railways per mile per week.

to gross earnings.

11 of Report).

railway has been amalgamated with the system by which it has been worked.

24 MORVI, 2′ 6″. (94·36 MILES.)		25 BARSI, 2′ 6″. (21·59 MILES.)		26 TARAKESHWAR-MAGRA, 2′ 6″. (31·12 MILES.)		27 RANAGHAT-KRISHNAGAR, 2′ 6″. (20·25 MILES.)		28 TEZPUR-BALIPARA, 2′ 6″. (20·10 MILES.)		CHERRA-COMPANY GANJ, 2′ 6″. (8·00 MILES.)		29 DARJEELING-HIMALAYAN, 2′ 0″. (51·00 MILES.)		30 HOWRAH-AMTA, 2′ 0″. (28·69 MILES.)		31 HOWRAH-SHEAKHALA, 2′ 0″. (19·75 MILES.)		32 JORHAT, 2′ 0″. (30·20 MILES).		Railway.
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Calendar year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1865
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1877
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1878
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	103	58·32	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	141	75·70	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	162	63·11	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	...	...	167	66·26	...	...	...	...	40	141·60	1884
...	...	...	...	...	...	...	...	...	...	...	...	‡	‡	...	...	...	...	25	123·14	1885
30	103·28	...	...	...	...	...	...	...	...	17	452·38	188	51·23	...	...	...	...	28	136·28	1986
39	86·87	...	...	...	...	...	...	...	...	25	207·54	189	55·86	...	...	...	...	32	127·99	1887
46	86·44	...	...	...	...	...	...	...	...	21	339·84	232	53·92	...	...	...	...	38	99·86	1888
50	68·01	...	...	...	...	...	...	...	...	26	240·69	217	60·10	...	...	...	...	42	105·94	1889
60	70·34	...	...	...	...	...	...	...	...	45	116·33	217	59·60	...	...	...	...	44	90·06	1890
63	64·90	...	...	...	...	...	...	...	...	44	103·28	231	57·61	...	...	...	...	47	97·70	1891
63	57·83	...	...	...	...	...	...	...	...	45	95·33	240	57·46	...	...	...	...	48	82·16	1892
66	54·86	...	...	...	...	...	...	...	...	55	85·08	239	55·41	...	...	...	...	52	79·32	1893
65	55·46	...	...	...	...	...	...	...	...	60	82·31	239	59·27	...	...	...	...	52	84·43	1894
75	45·91	...	...	...	...	...	...	...	...	59	88·08	279	50·92	...	...	...	...	62	77·81	1895
79	53·06	...	...	...	...	...	...	...	...	63	97·45	294	53·98	...	...	...	...	65	84·73	1896
87	50·49	115	80·00	...	...	...	...	...	...	*53	392·84	281	55·28	...	...	...	...	69	85·33	1897
77	56·41	116	81·15	46	71·65	...	...	82	76·49	26	6,212·77	285	54·79	152	58·36	70	72·12	70	69·02	1898
86	59·56	139	58·63	41	81·58	59	81·84	91	72·51	92	483·88	270	65·07	168	55·02	65	70·77	72	106·16	1899
86	62·49	111	65·90	47	72·63	66	74·95	92	73·12	†	†	305	55·28	172	51·99	74	64·71	63	118·05	1900
73	65·00	150	52·69	51	70·23	66	78·03	80	79·84	...	...	297	60·17	175	56·21	77	70·52	56	105·01	1901
62	62·85	134	64·81	52	70·52	72	71·97	81	74·53	...	...	321	54·66	178	49·86	80	61·33	57	104·22	1902

* For first-half of the year only, as traffic was stopped during the next half year on account of damage by earthquake.
† Closed for traffic from the 25th March 1900, and subsequently abandoned.
‡ Information not available.

and proportion of expenses to earnings includes steam-boat.

represents open mileage on the 31st December 1902.

P. T. O.

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	STATE LINES												
GAUGE.	5' 6"												
Class: No.	1 (a)												
Railway.	EAST INDIAN.										BENGAL		
Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.
1879	1,588	31,467,091	34,32,77,360	4,35,46,730	2,86,14,179	8·34	1,65,74,363	...	61,25,877	+ 59,14,239	...	...	...
1880	1,600	...	*38,13,53,183	4,35,04,947	2,96,72,035	7·52	1,98,06,263	...	17,72,690	+ 20,93,082	...	...	...
1881	1,600	...	38,65,39,533	4,54,11,472	3,08,35,036	7·98	31,05,426	1,78,92,000	20,63,867	+ 82,73,743	...	10,51,983	...
1882	1,603	...	38,84,97,311	4,71,17,594	2,96,57,086	7·63	32,81,764	1,73,92,000	17,88,073	+ 71,95,249	20	46,38,355	...
1883	1,605	...	39,02,67,160	4,94,67,085	3,11,50,980	7·98	38,16,170	1,72,57,772	19,99,731	+ 80,77,307	52	79,36,735	1,07,954
1884	1,605	...	39,35,14,616	4,38,38,714	2,73,22,003	6·94	35,58,635	1,78,50,459	11,72,323	+ 47,41,188	125	90,54,719	4,54,837
1885	1,611	...	39,63,72,425	4,63,86,889	3,30,16,960	8·33	38,13,262	1,79,75,714	16,29,502	+ 95,98,482	125	90,04,061	5,35,353
1886	1,611	...	39,84,61,774	4,66,70,853	3,05,13,359	7·66	39,91,104	1,89,50,137	14,97,276	+ 60,74,842	125	89,65,705	5,67,343
1887	1,610	...	39,89,90,537	4,60,65,661	3,13,34,263	7·83	40,70,944	1,92,13,333	15,87,252	+ 64,62,734	125	91,09,422	6,48,494
1888	1,610	...	39,87,03,386	4,54,36,902	3,03,35,075	7·60	40,73,297	2,03,43,530	11,64,693	+ 47,53,555	125	92,53,170	7,12,901
1889	1,610	...	39,96,98,156	4,49,57,901	2,94,05,230	7·36	41,84,108	2,09,60,000	8,31,347	+ 34,28,775	125	94,46,671	7,37,191
1890	1,610	...	39,98,98,614	4,40,57,665	2,98,26,815	7·46	41,83,278	2,03,43,530	10,37,019	+ 42,62,988	125	96,88,212	6,67,804
1891	1,610	...	39,52,94,683	4,56,87,001	3,60,37,028	9·03	43,93,426	1,86,94,054	26,45,392	+ 1,03,04,156	125	99,44,845	8,11,666
1892	1,610	...	40,02,73,362	4,91,41,600	3,48,16,919	8·70	37,25,734	2,06,47,164	20,88,760	+ 83,55,041	125	1,00,65,784	7,69,347
1893	1,613	...	40,68,96,213	5,08,44,654	3,60,94,293	8·87	41,26,889	2,34,46,780	17,04,125	+ 68,16,499	125	1,00,88,983	7,83,529
1894	1,664	...	41,02,12,212	5,26,89,485	3,64,26,405	8·88	43,37,988	2,43,89,582	15,39,767	+ 61,59,068	125	1,01,41,094	8,20,179
1895	1,700	...	41,59,93,876	5,41,50,856	3,78,34,726	9·10	45,73,681	2,61,01,122	14,29,078	+ 57,39,848	125	1,01,77,466	9,47,391
1896	1,701	...	42,05,41,859	5,40,69,142	3,67,77,682	8·75	46,90,562	2,58,59,455	12,45,733	+ 49,81,932	125	1,06,38,927	9,33,266
1897	1,705	...	43,17,67,029	5,88,28,013	4,14,93,469	9·61	48,20,238	2,47,34,406	23,87,763	+ 95,51,062	125	1,17,36,810	11,38,199
1898	1,712	...	44,49,70,192	5,97,96,060	4,08,07,269	9·17	50,46,514	2,32,64,533	24,99,244	+ 99,96,978	125	1,23,58,300	10,24,657
1899	1,711	...	46,48,16,064	6,35,45,974	4,26,60,018	9·18	54,64,962	2,21,45,516	30,09,920	+ 1,20,39,680	125	1,26,78,629	11,39,689
1900	1,840	...	48,06,19,396	6,84,74,972	4,47,15,571	9·30	60,18,054	2,15,60,963	18,09,104	+ 1,53,27,450	125	1,26,96,415	13,33,419
1901	1,838	...	49,44,34,925	7,03,96,636	4,57,13,311	9·25	65,46,878	2,16,82,360	18,51,450	+ 1,56,32,623	125	1,29,54,075	14,05,248
1902	1,923	...	50,84,16,708	6,77,38,713	4,29,80,833	8·46	70,34,492	2,16,46,868	16,19,965	+ 1,26,79,508	125	1,31,11,415	13,17,214

* Including Rs. 3,51,30,587 on account of

† Including annuity charges, as

‡ The gain in 1900 was due to

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DIX 7.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 45 of Report.)

WORKED BY COMPANIES.													CLASS OF RAILWAYS.
5′ 6″													GAUGE.
3 (*a*)					4 (*a*) and (*b*)								Class: No.
CENTRAL.					BENGAL-NAGPUR.								Railway.
Net traffic earnings.	Per cent on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Calendar year.
Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
...	...	...	...	...	...	28,62,990	...	...	...	83,911	...	—83,911	1879
...	...	...	...	...	53	55,49,511	1,03,952	28,215	0·51	1,58,804	...	—1,30,589	1880
...	...	51,616	...	—51,616	98	73,63,710	2,86,529	66,056	0·90	2,62,932	...	—1,96,876	1881
...	...	1,85,534	...	—1,85,534	149	90,64,388	6,04,386	1,89,171	2·09	3,39,967	...	—1,50,796	1882
— 39,390	...	3,17,449	...	—3,56,839	149	96,43,590	13,29,021	6,83,860	7·09	3,73,283	...	+ 3,10,577	1883
— 1,19,682	...	3,62,189	...	—4,81,871	149	1,06,34,112	13,23,014	6,58,930	6·19	4,24,400	...	+ 2,33,630	1884
8,233	0·09	3,60,162	...	—3,51,929	149	1,50,66,406	14,14,889	4,93,575	3·28	5,86,281	...	—92,706	1885
— 42,528	...	3,75,210	...	—4,17,738	186	1,81,70,455	14,24,521	5,33,514	2·94	7,29,554	...	—1,96,041	1886
— 7,928	...	4,60,840	...	—4,68,768	186	2,42,30,987	14,47,705	3,03,207	1·25	13,35,563	...	—10,32,356	1887
1,58,145	1·91	5,19,942	...	—3,61,797	225	5,23,92,291	16,09,195	5,62,971	1·07	22,17,333	...	—16,54,362	1888
2,95,988	3·13	5,18,693	...	—2,22,705	348	7,08,75,456	19,96,930	4,03,160	0·57	29,96,364	...	—25,93,204	1889
2,45,907	2·54	4,39,962	58,992	—2,53,047	584	8,14,66,762	28,64,578	5,47,453	0·67	33,88,852	...	—28,41,389	1890
3,27,736	3·30	4,72,482	73,429	—2,18,175	831	9,08,04,164	54,57,356	26,84,453	2·96	35,05,676	...	—8,21,223	1891
3,12,903	3·11	5,30,251	74,600	—2,91,948	831	9,56,14,736	60,83,562	30,08,166	3·15	39,05,345	...	—8,97,179	1892
3,14,992	3·12	5,37,007	79,647	—3,01,662	862	9,80,08,424	64,12,751	32,62,220	3·33	43,97,594	...	—11,35,374	1893
2,41,182	2·37	6,11,415	...	—3,70,233	864	9,81,23,789	66,90,648	32,58,414	3·32	45,83,933	...	—13,25,519	1894
3,98,809	3·92	6,08,944	85,023	—2,95,158	861	9,88,94,777	68,74,740	35,41,444	3·58	48,56,800	...	—13,15,356	1895
3,44,465	3·20	5,69,175	91,305	—3,16,016	861	11,05,30,319	63,68,525	29,27,869	2·65	48,27,504	...	—18,99,635	1896
5,16,922	4·40	5,36,809	95,271	—1,15,158	861	13,04,58,784	62,00,309	29,79,559	2·28	51,35,240	...	—21,55,681	1897
3,68,008	2·98	5,89,231	1,20,642	—2,71,865	1,067	14,67,03,520	68,79,193	33,63,854	2·29	54,23,186	...	—20,59,332	1898
4,41,813	3·48	5,07,035	97,583	—1,62,803	1,190	16,65,90,365	90,73,460	47,21,814	2·83	59,75,853	...	—12,54,039	1899
5,50,699	4·34	5,04,985	1,21,611	— 78,897	1,226	17,41,74,604	1,29,75,223	77,13,050	4·43	64,90,637	...	‡ +12,22,413	1900
6,42,940	4·96	5,08,291	1,46,144	— 11,495	1,609	21,19,23,276	1,30,77,769	61,48,648	2·90	79,88,163	1,78,810	— 20,18,325	1901
5,73,918	4·38	5,11,298	1,53,667	— 91,047	1,602	22,51,91,979	1,42,18,227	69,79,346	3·10	85,44,311	41,604	— 16,06,569	1902

prémium paid for the purchase of line.
the figures cannot be separated.
exceptional famine traffic.

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P. T. O.

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	STATE LINES
GAUGE.	5′ 6″
Class: No.	7 (*a*), (*b*) and (*c*)
Railway.	GREAT INDIAN PENINSULA.

Calendar year.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Guaranteed interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879 . . .	1,288	23,462,648	25,59,56,152	2,52,48,315	1,01,90,602	3·98	1,24,65,646	...	6,14,291	—28,89,335
1880 . .	1,283	23,457,144	25,58,96,113	2,49,53,253	1,11,05,551	4·34	1,24,93,200	...	5,53,836	—19,41,485
1881 . .	1,288	23,612,059	25,75,86,095	3,20,56,823	1,61,74,097	6·28	1,24,93,200	...	18,23,748	+18,57,149
1882 . .	1,288	23,612,463	25,75,90,499	3,53,63,201	1,80,88,483	7·02	1,24,93,200	...	32,05,883	+23,89,400
1883 . .	1,288	23,992,881	26,07,58,700	3,51,14,365	1,75,36,005	6·72	1,25,12,925	...	33,22,918	+17,00,262
1884 . .	1,288	24,153,947	26,34,97,600	3,36,56,544	1,59,55,250	6·06	1,42,81,503	...	24,76,043	—8,62,301
1885 . .	1,288	24,607,304	26,84,43,326	3,64,32,047	1,79,31,397	6·68	1,51,17,467	...	26,97,344	+4,16,586
1886 . .	1,288	24,685,805	26,92,99,673	3,92,57,907	2,08,78,390	7·75	1,60,91,138	...	39,89,569	+7,97,683
1887 . .	1,288	24,784,517	27,03,76,543	3,99,27,468	2,10,86,231	7·80	1,66,44,568	...	41,03,068	+3,32,601
1888 . .	1,288	24,987,725	27,25,93,364	4,10,59,219	2,16,35,667	7·94	1,72,81,176	...	43,31,246	+23,245
1889 . .	1,288	25,211,998	27,50,39,981	3,70,68,814	1,78,91,616	6·51	1,74,32,160	...	26,82,255	—22,22,799
1890 . .	1,288	25,458,497	27,77,29,064	3,81,45,242	1,90,22,952	6·85	1,85,73,271	...	31,04,971	+3,94,710
1891 . .	1,288	25,439,314	27,75,19,781	4,52,55,333	2,31,50,708	8·38	1,67,57,262	...	51,89,008	+13,04,438
1892 . .	1,287	25,411,882	27,72,17,255	4,06,65,627	2,01,95,097	7·28	1,88,04,314	...	38,13,506	—24,22,723
1893 . .	1,287	25,418,604	27,72,93,860	3,88,13,742	1,79,90,922	6·49	1,91,63,618	...	29,25,476	—41,00,172 †
1894 . .	1,287	25,585,002	27,91,09,112	3,62,74,296	1,62,42,786	5·82	2,18,32,651	...	30,40,331	—86,30,196
1895 . .	1,287	25,624,430	27,95,39,435	3,57,90,194	1,47,16,901	5·26	2,16,97,060	...	16,20,361	—86,00,520
1896 . .	1,288	25,577,674	27,90,29,173	3 44,19,629	1,54,05,960	5·52	2,02,18,872	...	21,53,257	—69,67,069
1897 . .	1,288	25,601,281	27,92,85,611	2,84,32,402	93,83,654	3·36	2,89,46,479	...	...	—95,62,825
1898 . .	1,288	25,602,652	28,18,37,621	3,48,77,496	1,41,02,053	5·00	1,83,20,513	...	13,57,327	—55,25,787
1899 . .	1,288	26,053,839	28,55,49,756	3,58,09,431	1,56,57,520	5·48	1,79,65,944	...	17,77,032	—40,85,456 §
1900 . .	1,358	**25,082,787	42,77,73,327 * & † †	3,46,31,925	95,37,130§ 66,30,083‡	1·55	$9,65,500§ 24,34,267‡	‡ 94,88,889	14,48,203 §	—8,76,573 § —52,93,073 ‡
1901 . .	1,548	...	42,88,90,745	4,16,57,453	2,16,48,151 ‡‡	5·05	48,96,908 ‡‡	1,90,87,970	2,72,210	—26,08,937
1902 . .	1,562	...	††43,07,94,701	‡‡1,23,12,663	2,10,73,893	4·89	49,41,692	1,90,55,785	2,92,872	— 32,17,456

* Capital expenditure to 31st December 1900, including expenditure on the Wardha Coal and Dhond-Manmad railways.
† Including Rs. 12,24,41,611 for premium paid for the purchase of line.
‡ For second-half of 1900. § For the first-half of 1900.

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report).

WORKED BY COMPANIES.

CLASS OF RAILWAYS.	GAUGE.	Class: No.	Railway.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
				Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
	5′ 6″		DHOND-MANMAD.	146	98,90,308	4,67,557	—27,664	...	4,07,525	—4,35,189	1879
				146	1,07,29,227	6,95,094	65,145	0·61	4,76,799	—4,11,154	1880
				146	99,49,346	6,33,862	1,22,588	1·23	3,93,438	—2,70,850	1881
				146	99,25,416	7,39,558	1,59,192	1·60	3,97,802	—2,38,610	1882
				146	1,00,64,757	8,22,833	1,92,139	1·91	4,02,585	—2,10,446	1883
				146	1,02,49,438	8,77,100	2,03,785	1·99	4,08,283	—2,04,498	1884
				146	1,02,63,278	9,07,422	2,20,623	2·15	4,10,544	—1,89,921	1885
				146	1,09,26,745	9,84,718	2,33,764	2·14	4,30,353	—1,96,589	1886
				146	1,09,46,935	9,60,390	2,27,338	2·08	4,37,893	—2,10,555	1887
				146	1,09,75,115	10,31,762	2,55,445	2·33	4,38,458	—1,83,013	1888
				146	1,09,88,830	10,08,616	2,49,427	2·27	4,39,319	—1,89,892	1889
				146	1,09,93,448	10,61,316	2,68,134	2·39	4,39,629	—1,76,495	1890
				145	1,10,44,039	11,90,340	3,08,583	2·79	4,40,296	—1,31,713	1891
				145	1,10,73,028	12,18,412	3,28,335	2·96	4,42,535	—1,14,200	1892
				145	1,11,37,125	12,90,798	3,48,572	3·13	4,44,246	—95,674	1893
				145	1,12,11,642	13,61,866	3,81,993	3·41	4,48,018	—66,025	1894
				145	1,13,18,247	14,04,021	4,08,233	3·61	4,50,104	—41,871	1895
				145	1,13,73,050	13,11,585	3,67,395	3·23	4,55,018	—87,623	1896
				145	1,14,06,534	12,01,143	2,81,272	2·47	4,56,230	—1,74,958	1897
				145	1,14,23,076	11,18,296	2,89,536	2·53	4,56,411	—1,66,875	1898
				145	1,15,34,107	11,55,032	2,99,555	2·60	4,59,296	—1,59,741	1899
				146	‖	7,25,613	2,21,534	...	2,30,220	—18,686	1900
			Amalgamated with Great Indian Peninsula railway								1901
											1902
	5′ 6″		WARDHA COAL.	45	55,99,772	1,65,158	6,073	0·11	2,51,434	—2,45,361	1879
				45	57,32,921	3,02,879	—1,31,730	...	2,57,932	—3,88,762	1880
				45	58,80,993	4,75,988	1,19,447	2·03	2,37,916	—1,18,469	1881
				45	60,94,186	5,95,622	98,287	1·61	2,38,834	—1,40,547	1882
				45	63,93,758	7,64,702	5,89,382	9·22	2,47,602	+3,41,780	1883
				45	66,20,641	6,81,037	2,11,860	3·20	2,61,176	—49,316	1884
				45	66,65,755	6,53,649	1,46,395	2·20	2,64,219	—1,17,924	1885
				45	71,93,093	7,28,405	1,35,936	1·89	2,28,228	—1,42,292	1886
				45	71,00,635	7,68,052	1,31,981	1·86	2,89,465	—1,57,484	1887
				45	70,91,230	8,71,430	1,98,020	2·79	2,84,523	—86,503	1888
				45	70,54,755	8,62,694	2,99,621	4·25	2,82,844	+16,777	1889
				45	70,06,181	9,33,326	2,75,001	3·93	2,81,296	—6,295	1890
				45	49,81,196	2,58,971	60,053	1·21	2,03,779	—1,43,726	1891
				45	49,87,689	2,32,986	34,096	0·68	1,99,337	—1,65,241	1892
				45	49,87,689	2,10,856	89,213	1·79	1,99,484	—1,10,271	1893
				45	49,87,689	2,20,237	89,289	1·79	1,99,508	—1,10,219	1894
				45	49,90,794	1,93,552	76,362	1·53	1,99,539	—1,23,177	1895
				45	49,96,305	2,06,078	83,859	1·68	1,99,745	—1,15,886	1896
				45	49,96,325	1,98,858	58,534	1·17	1,99,794	—1,41,260	1897
				45	49,96,325	2,09,600	77,827	1·56	1,99,853	—1,22,026	1898
				45	49,96,325	2,07,216	82,500	1·65	1,99,852	—1,17,352	1899
				45	‖	1,75,380	80,754	...	99,927	—19,173	1900
			Amalgamated with Great Indian Peninsula railway								1901
											1902

‖ Included with the Great Indian Peninsula railway.
¶ For the first half of 1900. The figures for the second-half are included with those of the Great Indian Peninsula railway.
** Capital withdrawn by the Guaranteed Company to 30th June 1900 on which date the line was purchased by the State.
†† Including outlay on the Khamgaon and Amraoti railways, leased in perpetuity to the British Government.
‡‡ Including the figures of the Khamgaon and Amraoti railways for the second-half of 1902.

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	STATE LINES											
GAUGE.	5' 6"											
Class: No.	7 (d)											
Railway.	INDIAN MIDLAND.								BHOPAL-ITARSI			
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.
1879	66	73,22,551	90,916	—31,772	...	3,06,178	...	—3,37,950	...	...	...	...
1880	66	81,63,253	2,01,823	20,129	0·25	3,57,620	...	—3,37,491	...	...	...	...
1881	75	86,16,663	3,01,681	78,342	0·91	3,48,809	...	—2,70,467	...	...	...	...
1882	75	87,63,714	3,29,299	92,231	1·05	3,47,303	...	—2,55,072	11	12,50,000	14,376	2,704
1883	75	92,92,532	3,38,512	1,59,716	1·72	3,56,750	...	—1,97,034	11	12,50,000	25,573	—9,135
1884	75	1,18,68,111	3,62,326	1,72,603	1·45	3,74,122	...	—2,01,519	13	12,50,000	7,664	—1,466
1885	75	1,60,14,107	3,94,081	1,99,680	1·24	6,48,112	...	—4,48,432	13	12,50,000	27,425	—3,874
1886	117	2,48,06,293	3,91,832	2,14,526	0·86	18,69,268	...	—16,54,742	13	12,50,000	27,822	—3,240
1887	117	5,10,96,457	6,32,204	2,78,043	0·54	20,00,184	...	—17,22,141	13	12,50,000	48,227	3,850
1888	211	6,96,63,213	10,27,638	3,74,204	0·54	28,55,488	...	—24,81,284	13	12,50,000	55,117	5,340
1889	677	7,84,45,085	30,69,255	6,33,411	0·81	31,24,456	...	—24,91,045	13	12,50,000	79,163	—5,422
1890	677	8,32,79,427	31,24,365	5,99,780	0·72	36,09,286	...	—30,09,506	13	12,85,077	87,765	—16,572
1891	677	8,52,46,148	41,62,361	13,52,172	1·59	33,12,200	...	—19,60,028	13	15,13,568	1,30,884	48,607
1892	677	8,65,29,006	44,77,625	17,26,260	1·99	32,23,985	...	—19,97,725	13	17,46,208	1,53,099	56,397
1893	677	8,71,62,843	44,59,053	17,00,409	1·95	41,40,194	...	—24,39,785	13	20,25,058	1,69,162	52,038
1894	677	8,78,06,437	52,22,033	22,02,334	2·51	42,59,815	...	—20,57,481	13	21,71,496	1,61,638	61,455
1895	679	8,81,49,985	44,91,707	16,48,360	1·87	45,97,495	...	—29,49,135	13	22,47,963	1,42,658	46,114
1896	680	9,25,53,896	48,51,951	20,17,829	2·18	44,23,983	...	—24,06,154	13	22,71,877	1,63,688	62,744
1897	680	9,77,94,421	54,89,540	24,06,565	2·46	42,53,893	...	—18,47,328	13	22,97,134	1,52,215	61,135
1898	727	9,96,74,805	56,25,823	25,11,911	2·52	39,99,986	...	—14,88,075	13	23,24,365	1,93,364	79,435
1899	796	10,16,34,072	64,77,226	27,82,950	2·74	39,66,461	...	—11,83,511	13	23,61,938	2,09,611	84,080
1900	796	10,31,35,002	90,60,560	48,72,287	4·72	38,18,460	...	+10,53,827	13	23,87,339	2,55,120	1,27,332
1901	796	10,58,27,081	82,43,068	42,50,587	4·02	38,82,861	1,88,164	+1,79,562	13	25,46,891	2,92,861	1,44,235
1902	797	10,62,11,714	90,49,628	44,86,267	4·22	41,04,505	7,330	+3,74,432	13	28,02,330	3,53,111	1,71,236

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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

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WORKED BY COMPANIES—(*contd.*)										CLASS: OF RAILWAYS.
5'6"										GAUGE.
7 (*g*)			9 (*b*)							Class: No.
(BRITISH SECTION).			BEZWADA EXTENSION.							Railway.
Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
0'08	50,000	—47,296	...	...	...	...	...	...	...	1882
...	50,000	—59,135	...	...	...	...	...	...	...	1883
...	50,000	—51,406	...	...	...	...	...	...	...	1884
...	50,000	—53,874	...	...	...	...	...	...	...	1885
...	50,000	—53,240	...	...	...	...	...	...	...	1886
0'31	50,000	—46,150	...	8,11,654	...	...	...	16,363	—16,363	1887
0'43	50,000	—44,660	...	11,56,237	...	...	...	39,357	—39,357	1888
...	50,000	—55,422	21	13,46,302	76,671	16,326	1'21	53,530	—37,204	1889
...	50,351	—66,923	21	13,90,830	74,731	16,318	1'27	54,530	—38,212	1890
3'21	57,713	— 9,106	21	14,11,077	87,367	28,699	2'03	36,266	—22,567	1891
3'23	69,131	—12,734	21	14,17,674	98,779	28,347	2'00	56,584	—28,237	1892
2'57	78,429	—26,391	21	14,21,456	1,08,386	33,972	2'39	56,888	—22,916	1893
2'83	83,599	—22,054	21	14,26,901	1,71,016	71,270	5'00	57,122	+ 14,148	1894
2'05	89,323	—43,209	21	14,31,642	95,119	93,119	6'64	57,239	+ 37,880	1895
2'76	90,197	—27,363	21	14,35,588	73,057	38,496	2'68	57,406	—18,910	1896
2'66	91,896	—30,671	21	14,95,418	1,66,800	56,645	3'79	58,383	— 1,738	1897
3'42	92,477	—13,047	21	15,01,343	1,69,061	95,390	6'35	59,569	+ 35,821	1898
3'56	93,393	— 9,223	21	15,02,631	3,12,172	1,84,365	12'27	60,101	+ 1,24,264	1899
5'33	95,293	+ 32,039	21	15,02,618	3,56,446	2,38,989	15'90	60,106	+ 1,78,883	1900
5'66	98,989	+ 45,246	21	11,51,678	2,72,177	1,56,929	13'63	35,509	+ 1,21,420	1901
6'14	1,06,632	+ 64,604	21	11,60,425	2,89,663	1,40,329	12'08	46,375	+ 93,954	1902

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Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS : OF RAIL-WAYS.	STATE LINES										
GAUGE.	5′ 6″							5′ 6″ & 3′ 3½″			
Class : No.	10 (*b*)							8 (*f*) and (*g*)			
Railway.	MADRAS (NORTH-EAST LINE).							RAJPUTANA.			
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Miles.	Rs.	Rs.	Rs.
1879	...	...	...	...	...	...	...	753	7,06,47,354	38,64,997	15,41,903
1880	...	...	...	...	...	...	...	941	8,38,87,014	59,12,511	17,33,714
1881	...	...	...	...	...	...	...	1,256	9,30,43,645	94,70,410	35,96,044
1882	...	...	...	...	...	...	...	1,251	9,94,83,933	1,14,82,614	52,84,668
1883	...	...	...	...	...	...	...	1,346	11,08,57,933	1,35,64,166	63,39,208
1884	...	...	...	...	...	...	...	1,603	11,92,08,595	1,46,20,446	61,92,677
1885	...	...	...	...	...	...	...	1,667	12,22,63,117	1,73,00,501	79,71,964
1886	...	...	...	...	...	...	...	1,668	12,80,59,407	1,82,88,610	89,55,549
1887	...	...	...	...	...	...	...	1,668	12,87,69,487	1,65,28,203	81,24,547
1888	...	...	...	...	...	...	...	1,665	12,96,59,656	1,86,14,714	96,31,727
1889	...	...	...	...	...	...	...	1,672	13,02,53,556	1,99,30,005	91,32,788
1890	...	...	...	...	...	...	...	1,672	13,00,01,510	1,74,28,281	86,42,525
1891	...	...	...	...	...	...	...	1,674	13,17,20,440	2,17,89,570	1,23,17,065
1892	...	...	...	...	...	...	...	1,674	14,34,24,072	2,24,00,454	1,32,14,774
1893	...	...	...	...	...	...	...	1,699	14,30,06,325	2,26,33,265	1,33,25,640
1894	...	...	...	...	...	...	...	1,789	14,72,89,588	2,51,44,700	1,54,75,342
1895	...	...	...	...	...	...	...	1,789	5,05,55,6871	2,45,42,974	1,44,02,358
1896	...	...	...	...	...	...	...	1,815	15,03,08,348	2,10,41,002	1,13,79,807
1897	...	...	...	...	...	...	...	1,815	14,94,51,054	1,84,74,358	1,00,97,008
1898	...	...	...	...	...	...	...	1,815	15,03,74,730	2,23,17,315	1,19,05,991
1899	...	...	...	...	...	...	...	1,819	15,14,26,773	2,60,94,541	1,47,30,148
1900	...	...	...	...	...	...	...	1,819	15,31,25,211	2,91,75,054	1,60,55,050
1901	497	6,07,27,375	45,68,155	20,31,210	3·34	24,51,072	−4,19,862	1,789	15,43,58,624	2,78,62,296	1,48,89,645
1902	497	6,16,89,605	45,46,551	16,19,128	2·62	24,46,187	−8,27,059	1,789	15,64,35,445	2,58,96,694	1,36,25,409

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income derived by railways which are not guaranteed by the State.

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WORKED BY COMPANIES—(*contd.*)											CLASS OF RAILWAYS.
				3′ 3⅜″							Gauge.
				8 (*h*).							Class: No.
Malwa.				Palanpur-Deesa (State portion).							Railway.
Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
2·18	28,43,439	...	—13,01,536	...	...	...	...	...	...	...	1879
2·07	35,81,449	...	—18,47,735	...	...	...	...	...	...	...	1880
3·86	37,48,505	...	—1,52,461	...	...	...	...	...	...	...	1881
5·31	38,74,919	...	+14,09,749	...	...	...	...	...	...	...	1882
5·72	49,74,808	...	+22,64,400	...	...	...	...	...	...	...	1883
5·19	43,90,548	...	+18,02,129	...	...	...	...	...	...	...	1884
6·52	49,10,379	...	+30,61,585	...	...	...	...	...	...	...	1885
6·99	51,72,731	6,28,054	+31,54,764	...	...	...	...	...	...	...	1886
6·31	54,86,578	5,06,190	+24,38,779	...	...	...	...	...	...	...	1887
7·43	52,27,345	4,99,908	+39,04,474	...	...	...	...	...	...	...	1888
7·01	53,48,893	8,56,110	+30,27,785	...	...	...	...	...	...	...	1889
6·65	52,61,288	6,57,951	+27,23,286	...	...	...	...	...	...	...	1890
9·35	53,13,844	8,78,835	+61,24,386	...	...	...	...	...	...	...	1891
9·21	56,14,176	13,45,763	+62,54,835	...	46,746	...	...	...	1,031	—1,031	1892
9·32	57,00,808	13,24,918	+62,99,914	17	1,78,953	2,181	1,110	0·63	5,371	—4,261	1893
10·51	58,77,844	15,63,148	+80,34,350	17	2,14,601	20,163	11,781	5·49	8,783	+2,998	1894
9·57	59,78,606	16,21,635	+68,02,117	17	2,15,374	20,539	11,512	5·35	8,378	+3,134	1895
7·57	60,63,242	9,93,351	+43,23,214	17	2,32,746	28,765	15,072	6·47	9,149	+5,923	1896
6·76	60,48,581	5,09,720	+35,38,707	17	2,33,264	24,131	12,243	5·25	9,305	+2,938	1897
7·91	60,77,309	9,53,967	+48,74,715	17	2,33,264	21,306	11,628	4·99	9,331	+2,297	1898
9·73	68,92,658	9,92,364	+76,45,120	17	2,33,264	24,889	13,618	5·84	9,330	+4,288	1899
10·48	61,35,151	21,67,610	+77,52,289	17	2,33,264	26,585	12,616	5·41	9,330	+3,826	1900
9·63	61,89,498	13,785	+86,86,362	17	2,33,264	20,526	10,548	4·52	9,330	+1,218	1901
8·65	62,80,315	...	+73,45,094	17	2,36,786	18,913	8,330	3·52	9,408	—1,078	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAIL WAYS.	STATE LINES													
GAUGE.	3′ 3⅜″													
Class: No.	14 (a)							16 (b).						
Railway.	ASSAM-BENGAL.							TIRHOOT.						
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per-cent. on Capi-tal out-lay.	Interest.	Gain or loss to the State.	Length of line open	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per-cent. on Capi-tal out-lay.	Interest.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.
1879	...	...	...	...	...	...	...	85	53,38,320	4,38,733	1,07,819	2·02	2,37,411	—1,29,592
1880	...	...	...	...	...	...	...	85	56,13,274	5,51,068	2,33,662	4·16	2,50,659	—16,997
1881	...	...	...	...	...	...	...	85	72,02,917	5,84,255	2,36,200	3·28	2,67,245	—31,045
1882	...	...	...	...	...	...	...	85	1,07,92,877	6,60,022	2,54,047	2·36	3,86,612	—1,32,565
1883	...	...	...	...	...	...	...	193	1,32,83,024	8,92,441	2,59,705	1·96	4,99,014	—2,39,309
1884	...	...	...	...	...	...	...	226	1,48,64,982	11,90,072	2,66,582	1·79	5,74,369	—3,07,787
1885	...	...	...	...	...	...	...	236	1,44,47,916	12,78,634	3,59,269	2·49	5,86,195	—2,26,926
1886	...	...	...	...	...	...	...	246	1,54,33,549	1,48,638	5,01,189	3·25	6,30,944	—1,29,755
1887	...	...	...	...	...	...	...	259	1,97,49,195	17,22,953	6,95,725	3·52	7,79,801	—84,076
1888	...	...	...	...	...	...	...	278	2,07,78,252	18,07,283	7,98,875	3·85	8,17,485	—18,610
1889	...	...	...	...	...	...	...	273	2,12,28,094	18,96,674	9,78,246	4·61	8,41,932	+ 1,36,314
1890	...	...	...	...	...	...	...	323	2,29,94,165	23,92,977	13,21,797	5·75	9,41,207	+ 3,80,590
1891	...	1,53,203	...	...	...	5,893	—5,893	337	2,34,99,148	24,89,279	13,53,848	5·76	9,34,385	+ 4,19,463
1892	...	30,16,133	...	...	...	2,66,378	—2,66,378	343	2,43,25,804	21,84,862	13,15,815	5·41	9,50,025	+ 3,65,790
1893	...	1,07,63,192	...	...	...	7,09,987	—7,09,987	342	2,49,02,833	26,81,190	13,43,133	5·39	10,01,205	+ 3,41,928
1894	...	2,46,89,198	...	...	...	8,76,954	—8,76,954	342	2,50,08,061	29,42,305	14,63,223	5·85	9,98,388	+ 4,64,835
1895	130	4,04,38,298	2,14,426	—8,047	...	13,95,636	—14,03,683	342	2,56,02,092	30,89,644	14,88,367	5·81	10,18,013	+ 4,70,354
1896	286	5,21,39,304	6,18,785	33,238	0·06	23,73,034	—23,39,796	342	2,60,38,655	31,61,172	14,85,330	5·70	10,27,821	+ 4,57,509
1897	361	6,37,67,401	9,90,640	92,214	0·11	22,56,279	—21,84,065	342	3,11,00,098	32,38,109	15,54,907	5·00	10,38,630	+ 5,16,277
1898	379	7,56,41,721	13,08,124	54,551	0·07	24,45,275	—23,90,724	342	3,46,48,176	31,44,140	15,91,183	4·59	13,18,764	+ 2,72,419
1899	432	8,69,36,236	16,19,646	3,22,704	0·37	28,63,084	—25,40,380	342	3,80,27,533	34,24,808	13,80,161	3·63	14,62,603	* —82,442
1900	436	9,56,01,772	17,09,955	3,64,364	0·38	33,31,390	—29,67,026	463	4,30,15,249	36,47,197	15,16,850	3·53	16,19,231	†—1,02,381
1901	589	10,41,49,467	21,34,252	4,56,654	0·44	35,06,252	—30,49,598	519	4,61,91,293	43,16,760	21,98,807	4·76	17,67,799	‡+ 4,31,008
1902	589	11,11,34,922	20,96,058	2,54,418	0·23	38,08,387	—35,53,969	517	4,91,41,200	45,50,632	23,78,530	4·84	18,77,205	+ 5,01,325

* The loss in 1899 was due to damages by flood and temporary stoppage of traffic.
† The loss in 1900 was due to the inclusion of the capital outlay on the Hajipur-Katihar extension, only a portion of which was opened in 1900.
‡ The gain in 1901 was due to the completion of the Hajipur-Katihar extension.

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income derived by railways which are not guaranteed by the State.

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WORKED BY COMPANIES—(*contd.*)

CLASS OF RAILWAYS.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest	Company's share of net traffic receipts.	Gain or loss to the State.	Calendar year.
GAUGE.	3' 3⅜"								
Class: No.	17 (b).								
Railway.	LUCKNOW-BAREILLY.								
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
	...	...	...	...	...	...	...	...	1879
	...	...	...	...	...	...	...	...	1880
	...	...	...	...	...	...	...	...	1881
	...	...	...	...	...	...	...	...	1882
	...	4,84,915	...	...	...	11,292	...	—11,492	1883
	36	3,43,699	10,239	839	0·06	36,572	...	—35,733	1884
	36	25,45,567	82,827	17,243	0·68	53,247	...	—36,004	1885
	91	42,16,146	1,15,296	28,729	0·68	1,48,570	...	—1,19,841	1886
	141	52,24,221	2,92,470	67,924	1·30	1,85,046	...	—1,17,122	1887
	141	52,82,879	3,52,327	99,031	1·87	2,03,503	...	—1,04,472	1888
	141	54,59,585	4,28,731	1,47,868	2·70	2,16,189	...	—68,321	1889
	141	65,33,824	4,56,738	1,32,338	2·02	2,30,699	...	—98,361	1890
	198	79,17,846	4,95,068	1,73,011	2·19	2,72,065	...	— 99,054	1891
	198	81,66,804	6,82,836	2,74,601	3·36	3,07,651	11,501	— 44,551	1892
	222	83,89,362	7,28,878	2,73,541	3·26	3,26,770	2,135	— 55,364	1893
	231	85,93,058	9,72,269	4,48,218	5·22	3,45,323	79,310	+ 23,585	1894
	231	87,23,466	8,25,934	3,13,116	3·59	3,56,596	15,834	— 59,314	1895
	231	89,63,620	8,27,599	3,02,071	3·37	3,48,885	13,415	— 60,229	1896
	231	93,02,715	8,27,371	3,35,736	3·61	3,61,550	26,980	— 52,754	1897
	231	94,90,476	10,34,088	5,00,200	5·27	3,64,852	66,721	+ 68,627	1898
	231	94,97,485	12,72,160	6,33,355	6·63	3,65,537	76,332	+ 1,91,486	1899
	231	99,21,432	12,53,801	6,51,957	6·57	3,73,097	1,47,611	+ 2,31,249	1900
	231	1,01,84,243	13,72,520	7,58,124	7·44	3,91,796	99,195	+ 2,67,133	1901
	231	1,12,96,019	14,53,329	7,69,568	6·81	4,23,528	71,666	+2,74,374	1902

CLASS OF RAILWAYS.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
GAUGE.								
Class: No.	18 (c).							
Railway.	JODHPUR-HYDERABAD (BRITISH SECTION).							
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
	...	...	...	...	...	...	...	1879
	...	...	...	...	...	...	...	1880
	...	...	...	...	...	...	...	1881
	...	...	...	...	...	...	...	1882
	...	...	...	...	...	...	...	1883
	...	...	...	...	...	...	...	1884
	...	...	...	...	...	...	...	1885
	...	...	...	...	...	...	...	1886
	...	...	...	...	...	...	...	1887
	...	...	...	...	...	...	...	1888
	...	...	...	...	...	...	...	1889
	...	...	...	...	...	...	...	1890
	...	2,31,401	...	...	...	5,356	—5,356	1891
	59	16,31,818	33,206	—1,949	...	59,649	—61,598	1892
	59	16,61,091	1,30,817	16,471	0·99	65,767	—49,296	1893
	59	17,27,619	1,45,222	36,062	2·08	68,940	—32,878	1894
	59	17,74,095	1,68,139	46,609	2·63	71,080	—24,471	1895
	59	18,00,799	1,87,503	64,376	3·57	71,420	—7,044	1896
	59	18,37,796	2,05,182	59,413	3·23	73,552	—14,139	1897
	59	20,19,732	2,22,647	79,159	3·47	77,553	—7,394	1898
	59	33,48,948	2,25,242	88,463	2·64	1,07,380	—18,917	1899
	124	*41,71,400	4,93,231	65,933	1·70	1,78,984	—1,13,051	1900
	124	38,81,861	4,24,307	1,73,567	4·47	1,52,429	†+ 21,138	1901
	124	40,45,972	5,04,608	2,18,814	5·41	1,59,771	+ 59,043	1902

* Including the Hyderabad-Rahoki section.

† The gain in 1901 was due to the completion of the line which was previously only partially open.

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS : OF RAILWAYS.	STATE LINES											
GAUGE.	3' 3⅜".											
Class: No.	21 (a).								21 (b).			
Railway.	SOUTHERN MAHRATTA.								MYSORE SECTION			
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.
1879	...	...	...	...	...	...	...	...	...	7,98,213	...	...
1880	...	...	...	...	...	...	...	...	...	21,37,736	...	...
1881	...	...	...	...	...	...	...	...	58	36,56,345	1,31,525	53,753
1882	...	...	...	...	...	...	...	...	86	45,95,058	2,88,390	1,03,495
1883	...	...	...	...	...	...	...	...	87	57,69,057	3,02,895	99,675
1884	214	2,77,07,721	2,13,959	—18,131	...	14,77,196	...	—14,95,327	140	62,64,620	3,61,448	1,65,479
1885	316	3,63,00,076	8,66,226	1,40,238	0·38	19,81,340	...	—18,41,102	140	64,89,346	4,33,954	2,07,784
1886	477	6,15,07,620	16,34,918	4,88,392	0·79	26,43,220	...	—21,54,828	140	71,35,111	4,69,274	1,05,385
1887	849	7,87,73,165	30,32,417	10,03,624	1·27	34,64,086	...	—24,60,462	140	91,36,438	5,13,784	1,41,198
1888	854	8,68,84,288	38,38,616	8,85,493	1·01	31,89,505	...	—23,04,012	140	1,25,76,692	5,70,657	52,295
1889	979	9,18,52,138	40,31,604	9,61,618	1·04	32,91,520	41,700	—23,71,602	296	1,44,24,093	8,96,273	2,22,034
1890	1,043	9,32,85,016	44,71,095	9,14,664	0·98	31,39,444	30,036	—22,54,816	296	1,47,11,610	11,86,318	2,61,700
1891	1,044	9,42,66,641	47,60,567	16,29,919	1·72	35,89,851	2,58,845	—22,18,777	296	1,50,76,285	13,24,525	4,43,717
1892	1,044	9,61,10,671	44,33,107	13,47,999	1·40	31,85,511	3,43,266	—21,80,778	296	1,46,36,205	13,99,463	4,47,906
1893	1,044	9,45,71,662	57,29,918	23,16,567	2·45	35,42,479	5,34,949	—17,60,861	296	1,46,42,217	16,83,203	6,74,705
1894	1,042	9,51,44,496	58,50,542	20,18,567	2·12	45,87,598	5,57,556	—31,26,587	296	1,47,60,293	14,85,412	4,76,156
1895	1,042	9,56,02,591	64,68,011	25,88,948	2·71	46,80,290	5,22,407	—26,13,749	296	1,49,22,452	15,78,281	6,30,769
1896	1,042	9,60,94,788	67,12,239	29,11,959	3·03	44,45,740	7,23,698	—22,57,479	296	1,51,08,257	15,84,981	6,76,873
1897	1,042	9,67,12,838	64,92,310	27,82,625	2·88	42,62,886	6,97,133	—21,77,394	296	1,51,99,757	18,80,019	7,95,147
1898	1,042	9,74,67,550	50,61,871	15,02,414	1·54	41,10,275	5,44,277	—31,52,138	296	1,55,07,319	13,92,851	4,13,421
1899	1,042	9,78,60,569	58,70,616	18,95,002	1·94	40,10,557	3,85,332	—25,00,887	296	1,56,75,416	10,60,469	3,29,033
1900	1,042	9,82,62,274	64,66,526	22,83,366	2·32	40,02,119	5,81,807	—23,00,560	296	1,58,70,510	13,76,391	4,71,201
1901	1,042	9,84,64,118	58,29,471	17,31,134	1·75	40,42,851	4,92,728	—28,04,445	296	1,60,14,879	14,33,240	4,07,791
1902	1,042	9,85,13,731	64,59,686	23,09,908	2·34	40,79,645	5,03,168	—22,72,905	296	1,60,76,009	15,97,046	5,58,082

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES—(*contd*).											CLASS OF RAILWAYS.
					3′ 3⅜″						GAUGE.
					21 (*c*)						Class: No.
(SOUTHERN MAHRATTA).					GUNTAKAL-MYSORE FRONTIER.						Railway.
Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
...	23,960	...	—23,960	...	...	...	...	...	...	...	1879
...	68,908	...	—68,908	...	...	...	...	...	...	...	1880
1·47	98,912	...	—45,159	...	...	...	...	...	...	...	1881
2·25	1,68,989	...	—65,494	...	...	...	...	...	...	...	1882
1·73	2,19,351	...	—1,19,676	...	...	...	...	...	...	...	1883
2·64	2,41,052	...	—75,573	...	...	...	...	...	...	...	1884
3·20	2,51,730	...	—43,946	...	...	...	...	...	...	...	1885
1·48	5,57,104	...	—4,51,719	...	...	...	...	...	...	...	1886
1·35	6,70,864	...	—5,29,666	...	...	...	...	...	...	...	1887
0·42	6,94,210	...	—6,41,915	...	...	...	...	...	...	...	1888
1·54	7,07,500	47,964	—5,33,330	...	...	...	...	...	...	...	1889
0·02	6,48,733	52,831	—4,39,864	...	...	...	...	...	...	...	1890
2·94	6,54,850	96,004	—3,07,137	...	...	...	...	...	...	...	1891
3·06	7,29,624	1,01,305	—3,83,023	63	...	...	...	...	...	...	1892
4·61	7,70,439	1,64,670	—2,60,404	120	58,39,866	1,97,374	78,935	2·35	4,67,933	—3,88,078	1893
3·23	8,38,525	1,43,566	—5,05,935	120	58,58,414	3,68,951	1,27,874	2·18	2,34,529	—1,06,655	1894
4·23	8,70,947	1,23,096	—3,63,274	120	58,71,739	4,39,329	1,81,657	3·09	2,34,639	—52,982	1895
4·48	8,21,588	1,21,768	—3,16,483	120	59,00,158	4,80,992	2,10,690	3·57	2,35,616	—24,926	1896
5·23	7,75,708	1,80,992	—1,61,553	120	59,07,499	6,38,278	2,75,983	4·68	2,36,000	+39,983	1897
2·67	7,38,461	1,66,986	—4,92,026	120	58,98,866	4,25,702	1,32,471	2·25	2,36,026	—1,03,555	1898
2·10	7,21,117	76,861	—4,68,945	120	58,98,608	3,84,829	1,28,459	2·18	2,35,996	—1,07,537	1899
2·97	7,18,200	1,11,070	—3,58,069	120	59,00,946	4,36,116	1,57,837	2·68	2,35,960	—78,123	1900
2·55	7,22,244	1,07,697	—4,22,150	120	59,02,583	4,47,313	1,36,659	2·32	2,36,115	—99,456	1901
3·47	7,21,062	1,16,979	—2,79,959	120	59,04,714	4,73,972	1,74,320	2·95	2,36,107	—61,787	1902

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Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	STATE LINES
GAUGE.	3′ 3⅜″
Class: No.	22 (*a*) and (*c*)
Railway.	SOUTH INDIAN.

Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	631	4,235,506	4,41,96,588	33,62,967	10,63,253	2·40	20,95,206	...	−10,31,953
1880	645	4,281,552	4,46,77,075	35,59,593	9,30,017	2·08	21,28,643	...	−11,98,626
1881	653	4,333,844	4,52,22,730	37,55,688	12,37,726	2·73	21,30,568	...	− 8,92,842
1882	653	4,347,889	4,53,69,280	37,58,214	14,02,328	3·09	21,40,871	...	− 7,38,543
1883	654	4,350,605	4,53,97,614	38,69,668	13,22,334	2·91	21,46,579	...	− 8,24,245
1884	654	4,428,743	4,62,51,662	41,89,049	14,92,491	3·19	25,40,471	...	− 10,47,980
1885	654	4,720,278	4,93,74,900	45,60,126	15,81,714	3·20	27,02,145	...	−11,20,431
1886	654	4,919,007	5,15,40,172	49,20,176	14,75,914	2·86	29,80,496	...	−15,04,582
1887	737	5,155,793	5,40,64,399	51,79,324	15,86,729	2·89	31,25,720	...	−15,38,991
1888	737	5,318,431	5,57,91,978	56,58,683	16,31,692	2·92	33,80,057	...	−17,48,365
1889	737	5,936,687	6,25,01,638	59,39,378	17,63,214	2·82	35,29,935	...	−17,66,824
1890	779	...	7,27,15,494	64,25,510	26,67,305	3·66	35,19,564	1,43,341	− 9,95,600
1891	901	...	*8,39,44,964	70,36,756	23,58,724	2·81	35,89,736	...	−12,31,012
1892	1,042	...	8,50,16,920	77,14,996	27,77,005	3·27	39,51,093	...	−11,74,088
1893	1,042	...	8,30,64,202	80,92,415	30,34,332	3·65	38,58,152	...	− 8,23,820
1894	1,042	...	8,37,46,521	80,46,339	32,83,865	3·95	42,81,812	1,06,449	−11,04,396
1895	1,042	...	8,35,71,763	89,14,947	38,96,987	4·66	42,77,578	2,55,271	− 6,35,862
1896	1,042	...	8,34,96,484	89,45,581	40,27,489	4·81	40,60,677	2,51,567	− 2,84,755
1897	1,042	...	8,33,80,017	91,81,409	42,96,757	5·15	38,76,142	3,25,390	+ 95,225
1898	1,018	...	8,12,55,032	84,67,581	38,35,527	4·72	37,49,521	3,06,473	− 2,20,467
1899	1,030	...	8,28,15,782	84,74,462	39,83,540	4·85	36,39,891	2,45,608	+ 98,041
1900	1,034	...	8,37,03,278	89,04,825	43,97,916	5·25	36,77,879	3,68,408	†+ 3,51,629
1901	1,034	...	8,91,12,077	1,01,41,657	54,15,176	6·07	37,23,736	4,59,540	+ 12,31,900
1902	1,142	...	9,17,25,914	1,05,98,282	57,14,254	6·23	*39,64,367	4,80,185	+ 12,69,702

* Including Rs. 67,33,159 on account

† The gain in 1900 was due to the

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income derived by railways which are not guaranteed by the State.

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WORKED BY COMPANIES—(*contd.*)							CLASS: OF RAILWAYS.
3′ 3⅜″							GAUGE.
							Class: No.
MAYAVARAM-MUTUPET.							Railway.
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	1889
...	61,509	...	...	...	1,230	—1,230	1890
...	4,82,149	...	...	...	10,873	—10,873	1891
...	13,84,423	...	...	...	37,331	—37,331	1892
...	21,62,957	...	...	...	70,947	—70,947	1893
54	23,79,123	1,63,460	62,942	2·65	1,00,701	—37,759	1894
54	24,47,438	2,42,024	93,669	3·83	95,700	— 2,031	1895
54	24,49,680	2,47,772	99,361	4·06	97,861	+ 1,500	1896
54	24,91,854	2,66,681	1,11,496	4·47	99,159	+ 12,337	1897
54	24,94,905	2,46,199	77,627	3·11	99,843	—22,216	1898
54	24,97,355	2,42,016	96,798	3·88	99,845	—3,047	1899
Purchased by the Tanjore District Board with effect from the 1st January 1900.							

of premium paid for the purchase of line as regards 1891 to 1901.

opening of 131 miles of new line.

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Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Raipipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	70
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Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	STATE LINES
GAUGE.	3' 3½"
Class: No.	23 (a)
Railway.	BURMA.

Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	161	1,23,86,597	9,55,918	1,41,743	1·14	5,47,438	...	−4,05,695
1880	167	1,25,87,340	13,22,710	5,21,085	4·14	5,62,331	...	−41,246
1881	167	1,36,51,992	15,43,622	6,45,077	4·73	5,86,210	...	+58,867
1882	167	1,78,39,222	15,75,691	6,30,430	3·53	6,23,969	...	+6,461
1883	167	2,19,77,689	15,62,886	5,60,766	2·55	7,46,068	...	−1,85,302
1884	260	2,56,37,089	24,05,421	8,21,936	3·21	9,69,215	...	−1,47,279
1885	333	2,72,85,343	21,63,656	4,73,123	1·73	10,61,184	...	−5,88,061
1886	333	2,88,52,604	26,57,955	9,41,149	3·26	12,64,242	...	−3,23,093
1887	333	3,66,52,847	33,24,263	15,58,303	4·25	13,15,249	...	+2,43,054
1888	441	4,83,73,677	33,76,218	12,71,960	2·63	18,18,560	...	−5,46,600
1889	553	5,12,49,158	46,90,263	15,73,552	3·07	20,17,224	...	−4,43,672
1890	556	5,56,22,296	54,71,432	23,48,191	4·22	21,35,308	...	+2,12,883
1891	617	6,08,31,289	58,55,197	23,71,392	3·90	23,28,287	...	+43,105
1892	717	6,64,02,875	71,00,618	33,86,088	5·10	24,90,221	...	+8,95,867
1893	730	7,03,47,005	67,22,506	22,42,492	3·19	27,19,995	...	−4,77,503
1894	745	7,37,14,721	62,87,354	23,23,328	3·15	28,94,375	...	−5,71,047
1895	834	7,57,29,659	67,11,062	27,02,356	3·57	30,01,163	...	−2,98,807
1896	886	8,13,44,229	76,08,558	29,85,751	3·67	34,43,442	...	−4,57,691
1897	887	8,73,31,890	86,76,403	38,82,673	4·45	38,31,674	1,62,877	−1,11,878
1898	936	9,24,93,509	89,91,451	37,88,523	4·10	39,49,899	1,61,076	−3,22,452
1899	993	10,11,17,647	88,25,724	35,78,407	3·54	38,35,209	1,24,994	−3,81,796
1900	1,124	11,03,96,635	1,10,29,947	48,94,824	4·43	38,49,026	3,47,606	+6,98,192
1901	1,178	11,99,22,408	1,18,85,329	49,89,656	4·16	40,41,108	4,42,439	+5,06,109
1902	1,261	12,70,23,590	1,25,02,671	52,72,683	4·66	43,94,823	4,69,365	+4,08,495

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WORKED BY COMPANIES—(*concluded.*)

CLASS OF RAILWAYS.	GAUGE.	Class: No.	Railway.	TOTAL STATE LINES WORKED BY COMPANIES.								
				Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Companies' share of net traffic receipts.	Gain or loss to the State.	Calendar year.
				Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
				4,763	75,82,76,205	7,81,60,391	4,16,06,436	5·48	3,88,36,514	...	67,40,168	—9,70,243	1879
				5,006	81,63,26,647	8,11,07,830	4,31,77,823	5·28	4,01,41,208	...	23,26,526	+7,10,089	1880
				5,474	83,97,37,952	9,46,46,855	5,31,64,366	6·33	2,37,24,777	1,73,92,000	38,87,615	+81,59,974	1881
				5,582	86,09,04,239	10,25,29,467	5,59,62,122	6·50	2,45,29,764	1,73,92,000	49,93,956	+90,46,402	1882
				5,818	89,33,76,969	10,81,53,100	5,88,45,245	6·58	2,57,73,676	1,72,57,772	53,22,649	+1,04,91,148	1883
				6,579	94,84,67,605	10,38,96,970	5,33,24,316	5·62	2,99,49,129	1,78,50,459	36,48,371	+18,76,357	1884
				6,824	98,17,85,663	11,39,37,679	6,27,64,324	6·39	3,27,96,267	1,79,75,714	43,26,846	+76,65,397	1885
				7,140	1,02,18,18,347	11,96,48,968	6,49,60,028	6·35	3,72,12,162	1,89,50,137	61,14,900	+26,82,829	1886
				7,657	1,10,62,82,922	12,10,91,617	6,65,29,041	6·01	4,00,33,164	1,92,13,333	61,96,510	+10,86,034	1887
				8,924	1,18,24,25,419	12,60,22,662	6,78,95,940	5·74	4,30,90,239	2,03,43,530	59,95,847	—15,33,676	1888
				8,924	1,23,20,13,498	12,76,70,163	6,39,68,574	5·19	4,49,34,667	2,09,60,000	44,59,376	—63,86,469	1889
				9,321	1,26,86,63,039	12,88,49,143	6,70,69,318	5·28	4,38,47,928	2,03,43,530	50,85,141	—22,07,281	1890
				9,822	1,29,98,82,267	14,67,92,241	8,47,45,715	6·51	4,59,04,240	1,86,94,054	91,41,513	+1,10,05,908	1891
				10,189	1,33,31,37,213	14,87,90,579	8,32,68,559	6·24	4,90,49,926	2,06,47,164	77,78,701	+57,92,768	1892
				10,359	1,35,85,51,256	15,16,99,678	8,31,93,577	6·12	5,23,86,202	2,34,46,780	67,35,920	+6,24,675	1893
				10,575	1,38,77,66,065	15,49,97,835	8,47,02,486	6·10	5,75,27,791	2,43,89,582	70,30,127	—42,45,014	1894
				10,832	1,41,81,97,639	15,53,05,548	8,51,14,369	6·00	5,91,18,811	2,61,91,122	56,72,705	—57,28,269	1895
				11,069	1,45,72,48,062	15,38,21,861	8,22,17,416	5·64	5,85,30,847	2,58,59,455	56,44,095	—78,16,981	1896
				11,149	1,51,79,49,248	15,27,01,770	8,15,13,994	5·36	5,73,68,338	2,47,34,406	43,86,126	—49,74,876	1897
				11,452	1,57,33,14,867	16,25,26,825	8,55,78,978	5·43	5,72,94,849	2,32,64,533	61,76,713	—11,57,117	1898
				11,760	1,64,63,19,523	17,54,49,213	9,40,94,303	5·71	5,81,35,954	2,21,45,516	67,86,024	+70,26,809	1899
				12,332	1,82,24,89,772	19,22,08,266	10,55,49,343	5·79	5,28,47,816	3,10,46,852	71,06,030	+1,45,45,645	1900
				13,386	1,96,68,69,863	20,57,89,038	11,19,03,772	5·69	5,11,91,889	4,07,70,270	42,52,162	+1,56,89,451	1901
				13,668	2,02,09,13,179	20,59,77,066	10,93,09,266	5·41	5,28,90,110	4,15,03,653	37,56,801	+1,11,58,702	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	STATE LINES WORKED													
GAUGE.	5′ 6″, 3′ 3⅜″ and 2′ 6″									5′ 6″				
Class: No.	2 (*a*) and (*b*)													
Railway.	EASTERN BENGAL.									EAST				
Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	£	Rs.	Miles.	Rs.		Rs.
1879	430	5,714,910	6,23,44,476	60,22,272	25,79,314	4·14	28,51,165	...	3,67,326	−6,39,177	...	...	...	...
1880	430	5,809,133	6,33,72,354	66,91,060	33,75,186	5·33	29,27,692	...	5,34,950	−87,456	...	...	...	...
1881	454	5,862,258	6,39,51,905	75,05,736	42,86,406	6·70	28,50,922	...	8,24,125	+6,11,359	...	...	...	...
1882	483	6,232,511	6,50,12,846	85,79,404	47,17,459	7·26	27,92,607	...	8,95,329	+10,29,523	...	...	...	...
1883	504	6,433,628	7,01,85,023	80,73,465	47,10,716	6·70	29,48,783	...	4,98,223	+12,54,710	...	...	...	...
1884	519	...	*7,52,12,686	78,12,979	24,80,526	3·30	15,92,486	3,50,920	...	+5,37,120	...	...	...	...
1885	606	...	8,25,04,899	72,85,916	25,25,336	3·06	21,82,794	7,22,920	...	−3,80,378	...	...	...	...
1886	606	...	8,94,01,378	82,73,918	30,89,720	3·44	24,34,239	19,04,750	...	−12,49,269	...	...	...	...
1887	645	...	9,04,97,792	94,30,399	45,04,782	4·98	41,71,008	14,90,152	...	−11,56,378	...	...	...	...
1888	673	...	9,52,54,255	1,05,19,210	55,25,424	5·80	38,83,744	20,11,011	...	+6,30,669	...	...	...	...
1889	746	...	9,73,16,142	1,11,76,674	61,91,625	6·36	30,18,703	20,43,953	...	+11,28,969	...	...	...	...
1890	764	...	10,94,13,252	1,14,78,382	60,70,323	5·55	30,96,150	18,14,110	...	+11,60,063	...	3,79,490	...	...
1891	777	...	11,24,90,649	1,26,75,440	65,32,100	5·81	32,01,166	19,48,198	...	+13,82,736	...	1,10,69,894	...	...
1892	812	...	11,53,92,055	1,15,56,446	62,33,727	5·40	38,86,181	16,53,922	...	+6,93,624	...	2,60,11,131	...	...
1893	813	...	11,61,73,626	1,20,51,147	66,35,138	5·71	39,53,310	16,49,185	...	+10,32,643	266	3,58,67,473	4,98,666	1,53,732
1894	813	...	11,66,97,311	1,40,15,726	83,53,559	7·16	41,01,624	18,91,850	...	+23,60,085	354	4,39,47,727	14,80,678	1,50,921
1895	814	...	11,65,36,758	1,45,09,739	89,74,474	7·70	41,50,415	18,72,565	...	+29,51,494	427	5,09,41,876	19,04,251	3,29,184
1896	814	...	11,91,25,239	1,50,81,670	90,02,286	7·56	41,06,132	17,56,153	...	+31,40,001	512	6,33,64,948	24,66,573	5,39,901
1897	818	...	12,41,13,831	1,47,62,233	80,60,612	6·49	42,80,503	16,53,278	...	+21,26,831	547	7,22,26,070	29,21,162	8,92,453
1898	827	...	12,71,99,245	1,47,17,879	83,35,064	6·55	43,89,356	15,75,020	...	+23,70,688	727	8,24,02,269	28,10,742	6,69,831
1899	832	...	13,09,94,403	1,56,12,436	83,01,083	6·34	45,00,276	15,62,391	...	+22,38,416	803	8,65,93,097	43,92,237	15,37,294
1900	843	...	13,51,97,243	1,71,00,460	92,46,424	6·84	47,02,816	15,66,769	...	+29,77,139	808	8,80,71,731	64,04,543	26,54,794
1901	854	...	14,13,39,852	1,65,99,440	83,08,281	5·88	41,11,665	23,37,123	...	+18,59,493		Amalgamated with B. N. and		
1902	898	...	14,93,27,007	1,78,93,098	91,48,340	6·13	44,25,883	23,29,895	...	+23,92,562				

* Including Rs. 89,20,143 on account
† Including Rs. 1,09,01,388 on account

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

BY THE STATE.											CLASS: OF RAILWAYS.
			5′ 6″ and 3′ 3⅜″								GAUGE.
			5 (*a*) and (*c*)								Class: No.
COAST.			OUDH AND ROHILKHAND.								Railway.
Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Surplus profits paid to Company.	Gain or loss to the State.	Calendar year.
Rs.	Rs.	Rs.	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
...	...	...	547	5,803,576	5,80,35,764	43,44,843	18,19,936	3·14	28,00,000	...	−9,80,064	1879
...	...	...	547	6,022,408	6,02,24,081	44,55,150	19,04,409	3·16	28,19,946	...	−9,15,537	1880
...	...	...	547	6,253,093	6,25,30,935	49,28,730	19,75,699	3·16	29,14,137	...	−9,38,438	1881
...	...	...	547	6,527,984	6,52,79,840	52,62,844	18,01,371	2·76	30,67,622	...	−12,66,251	1882
...	...	...	548	7,076,944	7,07,69,446	54,56,255	24,80,362	3·50	31,35,495	...	−6,55,133	1883
...	...	...	595	7,914,338	7,91,43,383	52,75,198	23,26,146	2·94	41,14,587	...	−17,88,441	1884
...	...	...	607	8,543,442	8,54,34,426	55,37,369	17,95,361	2·10	46,53,333	...	−28,57,972	1885
...	...	...	686	8,951,777	8,93,12,775	65,05,408	28,60,755	3·20	51,88,014	...	−23,27,259	1886
...	...	...	692	9,170,667	9,17,06,668	66,46,213	31,35,249	3·42	53,98,339	...	−22,63,090	1887
...	...	...	692	9,184,165	9,18,41,649	70,77,053	30,16,005	3·28	51,67,494	...	−21,51,489	1888
...	...	...	692	...	9,22,32,226	75,39,683	42,04,076	4·56	49,71,898	...	−7,67,822	1889
...	7,590	−7,590	692	...	†10,36,90,668	73,81,396	37,54,478	3·62	44,23,109	...	−6,68,631	1890
...	2,33,786	−2,33,786	692	...	10,37,39,746	85,64,209	49,42,458	4·76	47,25,666	...	+2,16,792	1891
...	7,41,621	−7,41,621	692	...	11,43,96,473	85,42,836	50,16,329	4·39	52,79,411	...	−2,63,082	1892
0·43	13,48,868	−11,95,136	741	...	11,18,18,680	87,15,927	50,17,053	4·49	55,01,058	...	−4,84,005	1893
0·34	15,92,909	−14,41,988	797	...	11,37,88,572	1,05,18,836	57,36,138	5·04	63,11,123	...	−5,74,985	1894
0·65	19,12,886	−15,83,702	797	...	11,74,06,536	1,02,94,880	52,55,948	4·48	63,69,949	...	−11,14,001	1895
0·85	23,72,875	−18,32,974	847	...	12,01,70,873	86,97,076	43,50,907	3·62	61,30,729	...	−17,79,822	1896
1·23	26,96,796	−18,04,343	892	...	12,53,20,627	85,15,856	36,96,778	2·95	59,77,486	...	−22,80,708	1897
0·81	30,98,828	−24,28,997	1,030	...	12,73,91,601	98,51,599	53,07,727	4·17	58,76,247	...	−5,68,520	1898
1·78	35,14,602	−19,77,308	1,030	...	13,30,85,811	1,11,38,990	60,76,595	4·57	59,75,202	...	+1,01,393	1899
3·01	34,46,555	−7,91,761	1,117	...	13,64,96,257	1,15,15,132	55,91,727	4·10	62,28,185	...	−6,36,458	1900
Madras railways.			1,117	...	13,97,68,253	1,32,54,991	72,20,007	5·17	63,12,044	...	+9,07,963	1901
			1,119	...	14,74,18,445	1,31,65,792	64,11,336	4·35	64,75,905	...	−64,569	1902

of premium paid for the purchase of line.
of premium paid for the purchase of line.

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

Referred to in paragraphs

CLASS: OF RAILWAYS.	STATE LINES WORKED								
GAUGE.	5′ 6″								
Class: No.	6 (*a*), (*f*), (*g*), & (*h*)								
Railway.	NORTH WESTERN.								
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	1,268	21,67,64,247	1,52,27,621	55,36,870	2·55	1,00,29,015	...	...	—44,92,145
1880	1,541	25,05,35,401	1,00,30,666	75,55,561	3·02	1,11,36,919	...	21,123	—36,02,480
1881	1,671	26,38,29,396	90,04,725	46,13,547	1·75	1,17,64,868	...	...	—71,51,301
1882	1,732	27,49,44,870	82,43,072	57,96,011	2·11	1,05,83,712	...	...	—47,87,701
1883	1,759	28,18,15,806	1,03,81,148	87,19,243	3·09	1,07,43,931	...	...	—21,24,688
1884	1,850	29,20,27,775	1,07,68,748	88,21,631	3·02	1,18,26,701	...	...	—30,05,070
1885	1,857	31,69,43,458	1,49,78,983	1,37,44,127	4·34	1,64,98,697	...	1,25,953	—28,80,523
1886	1,857	*36,99,90,705	2,53,60,901	1,19,92,839	3·32	1,14,07,148	53,00,733	...	—47,15,042
1887	2,398	38,37,70,872	2,10,03,388	57,77,585	1·51	1,01,56,779	88,30,322	...	—1,24,09,516
1888	2,442	39,71,81,000	2,57,79,305	83,66,598	2·12	1,09,18,938	83,45,756	...	—1,08,98,096
1889	2,432	40,94,31,603	2,82,06,820	1,02,84,741	2·51	1,13,76,516	83,98,768	...	—94,90,543
1890	2,442	43,75,89,322	2,73,99,035	1,02,57,601	2·34	1,16,66,585	74,54,323	...	—88,63,307
1891	2,357	44,08,53,143	3,25,78,355	1,21,32,521	2·75	1,20,67,543	80,05,299	...	— 79,40,321
1892	2,428	44,93,12,842	2,64,35,665	94,50,960	2·10	1,24,26,030	89,84,076	...	—1,19,59,146
1893	2,427	45,92,25,753	2,93,68,732	97,97,643	2·13	1,27,61,682	90,98,545	...	—1,20,62,584
1894	2,430	46,99,28,097	3,23,14,097	1,28,25,181	2·73	1,24,63,279	1,03,59,245	...	— 99,97,343
1895	2,477	48,49,36,634	3,52,18,382	1,64,46,998	3·39	1,35,01,193	1,03,17,385	...	— 73,71,580
1896	2,714	50,03,13,064	2,94,41,749	1,18,86,409	2·38	1,42,35,427	96,43,588	...	—1,19,92,606
1897	2,817	51,00,47,458	3,29,03,448	1,49,78,897	2·94	1,45,85,298	90,50,191	...	— 86,56,592
1898	2,818	51,58,34,091	3,76,01,912	1,85,74,360	3·60	1,50,41,459	86,35,849	...	— 51,02,948
1899	2,929	52,22,86,203	3,52,21,759	1,60,89,223	3·08	1,50,40,208	85,61,406	...	— 75,12,384
1900	3,006	52,78,48,285	3,15,22,237	1,32,19,151	2·50	1,54,25,164	85,76,682	...	—1,07,82,695
1901	3,117	53,25,49,620	4,11,89,277	2,03,56,471	3·81	1,55,50,694	86,02,222	...	— 37,96,445
1902	3,154	54,74,38,256	4,22,19,927	1,73,70,094	3·17	1,59,69,560	85,81,455	...	—71,80,921

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* Including Rs. 1,92,51,702 on account of premium paid for the

DIX 7—*continued.*

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

BY THE STATE—(*contd.*)

CLASS: OF RAILWAYS.

2′ 6″

GAUGE.

Class: No.

CHERRA-COMPANYGANJ.

Railway.

Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	1883
...	15,208	...	...	...	608	—608	1884
...	4,81,665	...	...	...	15,360	—15,360	1885
7	5,87,939	4,044	—14,074	...	21,901	—35,975	1886
8	7,11,143	9,705	—22,403	...	26,547	—48,950	1887
8	7,57,596	8,138	—20,622	...	30,102	—50,724	1888
8	7,66,715	10,316	—14,514	...	30,553	—45,067	1889
8	7,72,975	17,490	—2,856	...	30,771	—33,627	1890
8	7,73,282	18,472	—606	...	30,945	—31,551	1891
8	7,77,609	18,571	868	0·11	22,545	—21,677	1892
8	7,78,390	22,841	3,498	0·44	14,595	—11,187	1893
8	7,80,473	24,835	4,393	0·56	14,085	—9,692	1894
8	7,81,590	24,403	2,761	0·35	14,062	—11,301	1895
8	7,78,151	26,340	672	0·09	14,046	—13,374	1896
8	7,69,121	10,969	—31,922	...	13,544	—45,566	1894
8	7,70,027	2,004	—1,22,500	...	13,561	—1,36,061	1898
8	7,69,179	9,015	—34,607	...	13,566	—48,173	1899
...	7,68,723	4,851	—25,221	...	13,571	—38,792	1900
...	...	2,829	—8,594	...	13,531	—22,125	1901
...	...	...	Closed.	...	...	...	1902

purchase of line.

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	STATE LINES WORKED
GAUGE.	2' 0"
Class: No.	32
Railway.	JORHAT.

Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.
1879	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...
1884	12	4,38,338	1,161	—483	...	17,533	—18,016
1885	29	5,14,641	31,828	—7,455	...	19,395	—26,850
1886	27	5,84,608	38,271	—13,887	...	22,026	—35,913
1887	31	6,79,372	49,199	—13,772	...	26,608	—40,380
1888	31	7,10,376	55,471	75	...	27,807	—27,732
1889	31	7,33,649	59,665	—3,543	...	29,057	—32,600
1890	28	7,42,331	61,967	6,162	0·85	29,448	—23,286
1891	28	7,51,421	64,583	1,483	0·20	30,026	—28,543
1892	28	7,54,791	66,079	11,789	1·56	30,107	—18,318
1893	28	7,99,630	69,810	14,436	1·81	32,613	—17,577
1894	28	8,18,184	71,933	11,201	1·37	32,587	—21,386
1895	28	8,23,409	84,696	18,720	2·26	32,919	—14,199
1896	28	8,65,300	89,996	13,745	1·59	33,592	—19,847
1897	28	9,02,416	96,186	14,124	1·57	36,102	—21,978
1898	28	9,09,445	95,958	20,135	2·21	36,179	—16,944
1899	28	9,31,626	96,488	—5,946	...	37,228	—43,174
1900	30	9,98,643	86,695	—15,664	...	36,341	—52,005
1901	30	9,01,038	83,184	—4,169	...	36,248	—40,417
1902	30	8,95,693	86,641	—3,655	...	36,237	—39,892

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DIX 7—*continued.*

income derived by railways which are not guaranteed by the State.

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BY THE STATE—(*contd.*)

CLASS: OF RAILWAYS.

GAUGE.

Class: No.

Railway.

TOTAL
STATE LINES WORKED BY THE STATE.

Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Surplus profits paid to companies.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
2,245	33,71,44,487	1,54,94,736	99,36,120	2·95	1,56,80,180	...	3,67,326	—61,11,386	1879
2,518	37,41,31,836	2,11,76,876	1,28,35,156	3·43	1,68,84,557	...	5,56,072	—46,05,473	1880
2,672	39,03,12,236	2,14,39,191	1,08,75,652	2·78	1,75,29,927	...	8,24,125	—74,78,400	1881
2,762	40,52,37,556	2,20,85,320	1,23,14,841	3·04	1,64,43,941	...	8,95,329	—50,24,429	1882
2,811	32,27,70,275	2,39,10,863	1,59,01,321	4·92	1,68,28,209	...	4,98,223	—14,25,111	1883
2,976	44,68,37,390	2,38,58,085	1,36,27,820	3·05	1,75,51,915	3,50,926	...	—42,75,015	1884
3,100	48,58,79,089	2,78,34,096	1,80,57,369	3·71	2,33,69,579	7,22,920	1,25,953	—61,61,083	1885
3,183	54,10,77,405	4,01,82,542	1,79,15,353	3·31	1,90,73,328	72,50,483	...	—83,63,458	1886
3,774	56,73,65,847	31,71,38,504	1,33,81,441	2·36	1,97,79,281	1,03,20,474	...	—1,67,18,314	1887
3,846	58,57,44,876	4,34,38,223	1,68,87,480	2·88	1,90,28,085	1,03,56,767	...	—1,24,58,372	1888
3,909	60,04,80,335	4,69,93,158	2,06,62,385	3·44	1,94,26,727	1,04,42,721	...	—92,07,063	1889
3,934	65,25,88,058	4,63,38,270	2,00,85,708	3·08	1,92,53,653	92,68,433	...	—84,36,378	1890
3,862	66,96,78,135	5,39,01,059	2,36,07,956	3·52	2,02,89,132	99,53,497	...	—65,34,673	1891
3,968	70,66,44,901	4,66,19,597	2,07,13,673	2·93	2,23,85,895	1,06,37,998	...	—1,23,10,220	1892
4,283	72,46,63,602	5,06,27,117	2,16,21,410	2·98	2,36,11,526	1,07,47,730	...	—1,27,37,846	1893
4,430	74,59,60,364	5,84,26,105	2,70,81,393	3·63	2,45,15,607	1,22,51,095	...	—96,85,309	1894
4,551	77,14,31,803	6,20,36,351	3,10,28,085	4·02	2,59,81,424	1,21,89,950	...	—71,43,289	1895
4,923	80,46,17,575	5,58,03,584	2,57,93,920	3·21	2,68,92,801	1,13,99,741	...	—1,24,98,622	1896
5,110	83,33,79,523	5,92,03,854	2,76,10,942	3·31	2,75,89,829	1,07,03,469	...	—1,06,82,356	1897
5,438	85,45,06,678	6,50,80,094	3,27,84,617	3·84	2,84,55,639	1,02,10,869	...	—58,81,882	1898
5,630	87,46,60,319	6,64,70,925	3,19,63,642	3·65	2,90,81,082	1,01,23,797	...	—72,41,237	1899
5,804	88,92,90,882	6,66,33,918	3,06,71,211	3·45	2,98,52,332	1,01,43,451	...	—93,24,572	1900
5,118	81,45,58,763	7,11,29,721	3,58,71,996	4·40	2,60,24,182	1,03,39,345	...	—10,91,531	1901
5,201	84,50,79,401	7,33,65,458	3,29,26,115	3·90	2,69,07,585	1,09,11,350	...	—48,92,820	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAIL-WAYS.	LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT													
GAUGE.	5' 6"													
Class: No.	8 (a)									to (a)				
Railway.	BOMBAY, BARODA AND CENTRAL INDIA.									MADRAS.				
Calendar year.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay	Guaranteed Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	£	Rs.	Rs.	Rs.
1879	444	7,829,814	8,54,16,162	71,52,788	32,13,354	3·76	43,69,454	...	−11,55,900	858	10,502,112	11,45,68,493	66,26,486	20,75,170
1880	444	7,767,066	8,47,31,626	82,44,376	47,34,654	5·58	43,69,254	5,83,846	−8,02,293	858	10,448,004	11,39,78,220	61,62,546	19,57,137
1881	444	7,942,499	8,66,45,448	97,45,133	56,78,755	6·55	43,69,254	8,30,798	+4,78,703	858	10,450,716	11,40,07,808	63,11,312	20,75,856
1882	461	8,028,999	8,75,89,091	1,01,76,190	50,15,619	5·73	43,07,734	8,06,346	−98,461	861	10,447,214	11,39,69,608	69,18,571	25,70,841
1883	461	8,157,542	8,89,91,377	1,19,22,209	67,16,067	7·54	43,38,189	11,44,829	+12,33,049	861	10,449,273	11,39,92,074	66,31,909	25,26,549
1884	461	8,274,713	9,02,69,608	1,21,95,590	68,87,562	7·63	49,99,341	13,17,768	+5,70,453	861	10,473,022	11,42,51,164	71,41,318	29,35,687
1885	461	8,457,042	9,22,58,636	1,31,40,336	74,01,987	8·02	52,35,189	14,57,541	+7,09,257	861	10,544,706	11,50,33,160	76,57,993	32,79,168
1886	461	8,495,850	9,26,82,002	1,35,03,635	78,73,228	8·50	55,87,440	16,97,985	+5,87,803	860	10,631,619	11,59,81,297	79,66,097	32,29,243
1887	461	8,544,452	9,32,12,200	1,21,64,856	69,98,127	7·50	57,17,318	12,56,055	+24,754	827	10,456,434	11,40,70,190	81,72,535	28,80,029
1888	461	8,670,553	9,45,87,848	1,27,38,933	70,48,164	7·45	60,29,893	12,68,879	−2,50,608	839	10,576,377	11,53,78,656	85,31,654	35,21,615
1889	461	8,703,365	9,49,45,797	1,32,34,371	75,41,081	7·94	61,10,257	14,86,390	−55,566	839	10,668,589	11,63,84,605	91,10,894	37,38,421
1890	461	8,737,304	9,53,16,045	1,29,40,370	74,23,195	7·79	54,66,227	14,22,120	+5,34,848	839	10,815,222	11,79,84,234	95,06,134	45,21,480
1891	461	8,762,123	9,55,86,799	1,41,37,769	82,25,120	8·60	58,61,996	18,06,348	+5,56,776	839	10,903,942	11,89,52,099	93,44,688	39,06,529
1892	461	8,756,801	9,55,28,735	1,42,44,478	81,30,959	8·51	65,57,945	17,86,755	−2,13,741	839	10,979,085	11,97,71,835	96,24,679	42,92,133
1893	461	8,823,632	9,62,57,802	1,50,96,045	95,78,044	9·95	66,44,227	25,09,537	+4,24,280	839	11,035,704	12,03,89,499	1,05,05,036	54,21,742
1894	461	8,960,037	9,77,45,855	1,59,48,484	1,00,70,974	10·30	76,09,071	27,35,713	−2,73,810	839	11,048,154	12,05,25,315	1,03,21,012	49,47,863
1895	461	9,147,505	9,97,90,965	1,75,53,067	1,09,37,063	10·96	77,03,258	31,37,619	+96,186	839	11,081,749	12,08,91,797	1,12,08,407	58,10,310
1896	461	9,456,068	10,31,57,107	1,62,03,933	89,00,862	8·60	73,03,613	20,78,128	−4,80,879	839	11,105,608	12,11,52,091	1,08,80,251	53,85,291
1897	461	9,745,104	10,63,10,220	1,42,61,293	64,70,202	6·09	69,36,853	9,51,545	−14,18,196	839	11,136,169	12,15,01,808	1,14,65,314	59,82,565
1898	461	9,951,347	10,85,60,144	1,58,62,726	87,42,205	8·05	67,87,071	19,49,477	+5,657	839	11,197,627	12,22,69,990	1,07,20,483	54,12,657
1899	461	10,263,391	11,40,73,858	1,74,65,045	92,90,365	8·15	67,46,668	21,68,922	+3,74,775	843	11,288,477	12,34,93,025	1,05,45,102	50,16,254
1900	461	10,333,137	11,60,94,044	1,75,98,486	82,28,632	7·08	68,35,449	15,68,577	−1,75,394	844	11,490,267	12,62,82,369	1,13,39,222	53,70,820
1901	461	10,628,511	11,95,61,022	1,89,38,796	87,53,789	7·32	70,04,569	18,11,890	−62,670	873	11,880,597	13,13,51,379	1,14,86,803	57,85,603
1902	461	10,782,802	12,18,78,968	1,57,43,536	79,37,622	6·51	71,28,187	12,93,644	−4,84,309	888	12,171,619	13,50,23,683	1,18,41,074	57,91,420

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

OF INDIA UNDER OLD CONTRACTS.

Per cent. on Capital outlay.	Guaranteed Interest	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Guaranteed Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Calendar year.
CLASS OF RAILWAYS.													
Gauge.													
Class: No.				TOTAL LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER OLD CONTRACTS.									
Railway.													
	Rs.	Rs.	Rs.	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1·81	57,04,205	...	—36,29,035	1,302	18,331,926	19,99,84,655	1,37,79,274	52,88,524	2·64	1,00,73,459	...	—47,84,935	1879
1·73	57,16,332	...	—37,59,195	1,302	18,215,010	19,87,09,846	1,44,06,922	66,91,791	3·37	1,00,85,586	5,83,846	—39,77,641	1880
1·82	57,16,365	...	—36,40,509	1,302	18,393,215	20,06,53,256	1,60,56,445	77,54,611	3·86	1,00,85,619	8,30,798	—31,61,806	1881
2·25	56,89,011	...	—31,18,170	1,322	18,476,213	20,15,58,699	1,70,94,761	75,86,460	3·76	99,96,745	8,06,346	—32,16,631	1882
2·22	57,08,416	...	—31,81,867	1,321	18,506,815	20,29,83,451	1,85,54,118	92,42,616	4·55	1,00,46,605	11,44,829	—19,48,818	1883
2·57	64,23,432	...	—34,87,745	1,322	18,747,735	20,45,20,772	1,93,36,308	98,23,249	4·80	1,14,22,773	13,17,768	—29,17,292	1884
2·85	67,36,206	...	—34,57,038	1,322	19,001,748	20,72,91,796	2,07,98,429	1,06,81,155	5·15	1,19,73,395	14,57,541	—27,47,781	1885
2·78	71,24,952	...	—38,95,709	1,321	19,127,469	20,86,63,299	2,14,71,732	1,11,02,471	5·32	1,27,12,392	16,97,985	—33,07,906	1886
2·52	73,20,207	...	—44,40,178	1,288	19,900,886	20,72,82,390	2,03,37,391	98,78,156	4·76	1,30,37,525	12,56,055	—44,15,424	1887
3·05	76,23,851	...	—41,02,236	1,300	19,246,930	20,99,66,504	2,12,69,987	1,05,69,779	5·03	1,36,53,744	12,68,879	—43,52,844	1888
3·21	76,69,934	...	—39,31,513	1,300	19,371,954	21,13,30,402	2,23,45,265	1,12,79,502	5·34	1,37,80,191	14,86,390	—39,87,079	1889
2·83	68,85,958	...	—23,64,478	1,300	19,552,526	21,33,00,279	2,24,46,504	1,19,44,675	5·60	1,23,52,185	14,22,120	—18,29,630	1890
3·28	73,92,186	...	—34,85,657	1,300	19,666,065	21,45,38,898	2,34,82,457	1,21,31,649	5·65	1,32,54,182	18,06,348	—29,28,881	1891
3·58	83,62,369	...	—40,70,236	1,300	19,735,886	21,53,00,570	2,38,69,148	1,24,29,092	5·77	1,49,20,314	17,86,755	—42,83,977	1892
4·50	84,82,732	...	—30,60,990	1,300	19,859,336	21,66,47,301	2,56,01,081	1,49,99,786	6·92	1,51,26,959	25,09,537	—26,36,710	1893
4·14	96,56,469	...	—47,08,606	1,300	20,008,191	21,82,71,170	2,62,69,496	1,50,18,837	6·88	1,72,65,540	27,35,713	—49,82,416	1894
4·80	96,17,435	53,195	—38,60,320	1,300	20,229,254	22,06,82,762	2,87,61,474	1,67,47,373	7·59	1,73,20,693	31,99,814	—37,64,134	1895
4·44	89,92,684	...	—36,07,393	1,300	20,561,676	22,43,09,198	2,70,84,184	1,42,86,153	6·37	1,62,96,297	20,78,128	—40,88,272	1896
4·92	84,81,597	91,135	—25,90,167	1,300	20,881,273	22,78,12,928	2,57,26,607	1,24,52,767	5·46	1,54,18,450	10,42,680	—40,08,363	1897
4·43	82,40,191	90,546	—29,18,080	1,300	21,188,974	23,08,30,134	2,65,83,209	1,41,54,862	6·13	1,50,27,262	20,40,023	—29,12,423	1898
4·06	80,58,144	...	—30,41,890	1,304	21,551,868	23,75,66,883	2,80,10,147	1,43,06,619	6·62	1,48,04,812	21,68,922	—26,67,115	1899
4·25	81,24,701	...	—27,53,881	1,305	21,823,404	24,23,76,413	2,89,37,708	1,35,99,452	5·61	1,49,60,150	15,68,577	—29,29,275	1900
4·40	83,15,733	...	—25,30,130	1,334	22,509,108	25,09,12,404	2,74,25,599	1,45,39,392	5·79	1,53,20,302	18,14,890	—25,92,800	1901
4·29	84,41,464	...	—26,50,044	1,349	22,954,421	25,69,02,648	2,75,84,610	1,37,29,042	5·03	1,55,69,751	12,93,644	—31,34,353	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER															
GAUGE.	3′ 3⅜″								5′ 6″							
Class: No.	2 (c)								5 (b)							
Railway.	BRAHMAPUTRA-SULTANPUR.								HARDWAR-DEHRA.							
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1895	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1897	..	2,07,919	...	...	...	†	...	...	...	1,96,017	...	...	...	†	...	...
1898	...	12,55,457	...	...	...	†	...	...	...	10,79,345	...	...	...	†	...	...
1899	25	19,58,137	36,300	*	...	†	...	...	...	23,42,687	...	...	...	†	...	...
1900	59	24,20,811	1,36,587	*	...	†	...	...	32	25,67,093	1,60,485	*	...	†	...	...
1901	59	28,27,619	1,96,848	61,375	2·17	42,414	...	+ 18,961	32	28,12,301	2,13,456	1,06,728	3·80	84,220	...	+ 22,508
1902	59	29,17,993	2,40,424	1,22,753	4·21	86,750	...	+ 36,003	32	28,36,486	2,32,485	1,14,989	4·45	85,048	...	+ 29,941

* Paid over to the Company.

† Interest was charged to Capital.

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

MODERN CONTRACTS.								DISTRICT BOARD LINE.							TOTAL GAIN OR LOSS TO THE STATE FROM RAILWAYS.	CLASS: OF RAILWAYS.
								3′ 3⅜″								GAUGE.
TOTAL LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER MODERN CONTRACTS.								22 (*b*)								Class:
								TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET).								Railway.
Length of line open.	Capital expenditure to end of each year.	Gross Earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of surplus profits.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.		Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,18,66,564	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—78,73,625	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—24,80,232	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+8,05,342	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—71,17,319	1883
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—53,16,136	1884
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—12,43,467	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—89,88,535	1886
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—2,00,47,764	1887
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,88,84,892	1888
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,95,80,611	1889
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,24,73,289	1890
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+14,42,354	1891
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,08,01,429	1892
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,47,49,881	1893
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,89,12,739	1894
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—1,66,85,692	1895
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—2,44,03,875	1896
...	3,98,936	...	...	...	†	...	...	...	...	...	...	...	...	...	—1,06,65,593	1897
...	23,26,002	...	...	...	†	...	...	...	...	...	...	...	...	...	—99,51,472	1898
25	43,00,824	36,300	*	...	†	...	...	...	...	...	...	...	...	...	—28,81,543	1899
91	49,87,904	2,97,072	*	...	†	...	...	54	26,50,776	2,32,280	97,782	3·69	1,02,734	—4,952	+22,86,846	1900
91	56,39,920	4,10,304	1,68,103	2·98	1,26,634	...	+41,469	54	32,17,511	2,90,637	1,35,765	4·22	1,38,831	—3,066	+1,20,43,513	1901
91	57,54,479	4,92,909	2,37,742	4·13	1,71,798	...	+65,944	71	38,18,202	3,08,879	1,46,764	3·84	1,63,157	—16,393	+31,81,080	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS. / GAUGE. / Class: No. / Railway.	COLLIERIES.						OTHER CHARGES.					TOTAL GAIN OR LOSS TO THE STATE.
							UNCLASSIFIED EXPENDITURE.					
Calendar year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Capital outlay.	Gain or loss to the State.	39. Guaranteed companies—Land and supervision.	40. Subsidised companies—Land, interest and subsidy.	41. Miscellaneous railway expenditure	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs. *	Rs. *	Rs. *	Rs.
1879 .	Information not available.						Information not available.		6,32,840	...	1,96,830	—1,26,96,234
1880 .									5,76,140	...	5,77,080	— 90,26,245
1881 .									7,47,450	1,32,260	5,18,600	—38,78,542
1882 .									7,21,820	2,59,921	25,39,950	—27,16,348
1883 .							1,60,529	—6,421	6,73,260	5,45,739	—12,94,050	—71,85,858
1884 .							2,77,269	—10,076	6,14,570	3,95,510	9,75,540	—73,11,846
1885 .	2,27,954	34,893	—38,355	...	6,868	—45,223	2,93,561	—11,413	7,95,530	4,41,250	9,92,740	—35,29,623
1886 .	5,59,657	45,051	—61,309	...	13,930	—76,239	48,00,526	—1,91,842	6,62,350	4,52,430	9,43,990	—1,13,15,146
1887 .	6,20,414	1,03,639	17,878	2·88	23,291	—5,413	37,53,926	—1,50,168	5,14,350	4,36,270	5,18,470	— 2,16,72,375
1888 .	8,64,543	1,58,680	91,505	10·58	32,089	+ 59,416	47,05,423	—1,88,203	4,43,450	2,80,710	7,06,340	—1,99,44,177
1889 .	8,46,302	2,08,633	—19,748	....	34,217	—54,165	36,96,648	—1,47,866	3,09,520	6,91,300	14,91,240	—2,22,74,702
1890 .	9,09,570	3,64,292	1,05,450	11·59	35,117	+ 70,333	60,01,712	—2,39,338	4,29,880	3,62,880	14,91,970	—1,49,27,024
1891 .	24,75,244	8,60,755	1,63,447	6·60	1,00,320	+ 63,127	63,50,103	—2,53,834	1,92,570	3,31,300	9,20,600	—1,92,823
1892 .	25,53,361	8,58,941	58,863	2·31	1,01,844	—42,981	63,19,388	—2,61,588	2,94,230	2,90,260	—1,08,600	—1,15,81,888
1893 .	25,54,329	9,04,575	50,120	1·96	1,02,660	—52,540	64,91,787	—2,61,790	3,40,040	2,10,000	10,34,390	—1,66,48,641
1894 .	30,84,484	10,20,808	76,102	2·47	1,16,121	—40,019	65,60,878	—2,62,080	3,15,410	1,66,940	10,03,600	—2,07,00,788
1895 .	30,96,232	9,16,896	1,09,765	3·55	1,22,496	—12,731	66,67,455	—2,64,714	2,88,080	1,82,510	7,16,490	—1,81,50,217
1896 .	30,84,097	9,23,572	1,65,096	5·35	1,23,225	+ 41,871	66,89,067	—2,67,564	—15,938	6,96,486	5,81,805	—2,58,91,921
1897 .	30,75,712	8,88,935	1,41,307	4·60	1,23,765	+ 17,542	67,40,736	—2,69,474	1,61,611	9,58,305	5,87,519	—2,16,24,962
1898 .	29,49,005	10,44,140	2,11,183	7·16	1,20,269	+ 90,914	67,55,803	—2,71,796	2,98,114	6,75,823	56,973	—1,11,63,214
1899 .	28,35,874	7,52,267	1,74,385	6·15	81,628	+ 92,757	73,79,773	—2,90,852	7,26,013	2,84,004	5,16,639	— 46,06,234
1900 .	16,65,993	6,07,603	2,03,523	12·22	68,646	+ 1,34,877	73,87,308	—3,24,806	2,68,754	70,061	8,86,011	+ 8,72,391
1901 .	16,23,122	6,91,280	2,58,355	15·92	66,682	+ 1,91,673	73,81,054	—5,26,762	—1,94,361	—3,36,465	6,98,052	+1,15,41,198
1902 .	15,25,388	7,00,028	2,61,036	17·11	63,281	+ 1,97,749	74,44,156	—4,46,569	—95,692	—68,976	10,55,292	+20,41,636

* The figures up to 1895 are for official years, those for calendar years are not available.

† Arrived at thus:

	Rs.
Total charge	6,94,486
Deduct—Repayment of advances of interest	7,63,462
	—68,976

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State expenditure on Patri branch.	Capital expenditure on surveys (excluding abandoned surveys).	Stores suspense balances.	LINES UNDER CONSTRUCTION.										TOTAL.	Calendar year.
			5′ 6″	5′ 6″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	2′ 6″	2′ 6″	5′ 6″	2′ 6″		
			10 (*f*)	11	8 (*n*)	8 (*o*)	14 (*p*)	22 (*f*)	1 (*e*)	4 (*d*)		34		
			Azhikal-Mangalore.	Agra-Delhi chord.	Jaipur (Siwai Madhopur).	Ahmedabad-Dholka.	Noakhali (Bengal).	Tinnevelly Quilon (Travancore) Branch (Native state section).	Rewah.	Jubbulpur-Gondia extension and branches.	Moorshedabad branch, E. B. S. Ry.	Kalka-Simla.		
			Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
8,08,405	7,24,624	...	...	...	...	...	...	...	...	...	...	...	...	1882
8,08,405	9,72,535	...	...	...	...	...	...	...	...	...	...	...	...	1883
8,08,405	13,24,163	...	...	...	...	...	...	...	...	...	...	...	...	1884
8,08,405	16,20,228	...	...	...	...	...	...	...	...	...	...	...	...	1885
8,08,405	32,59,100	...	...	...	...	...	...	...	...	...	...	...	...	1886
8,08,405	14,72,443	...	...	...	...	...	...	...	...	...	...	...	...	1887
8,08,405	28,78,066	9,07,968	...	...	...	...	...	...	...	...	...	...	...	1888
8,08,405	32,82,526	6,24,951	...	...	...	...	...	...	...	...	...	...	...	1889
8,08,405	42,79,147	9,27,308	...	...	...	...	...	...	...	...	...	...	...	1890
8,08,405	49,35,844	8,46,529	...	...	...	...	...	...	...	...	...	...	...	1891
8,08,405	46,36,757	34,12,093	...	...	...	...	...	...	...	...	...	...	...	1892
8,08,405	38,55,759	8,56,505	...	...	...	...	...	...	...	...	...	...	...	1893
8,08,405	47,13,172	16,31,104	...	...	...	...	...	...	...	...	...	...	...	1894
8,08,405	51,48,973	17,12,436	...	...	...	...	...	...	...	...	...	...	...	1895
8,08,405	49,73,509	21,31,290	...	...	...	...	...	...	...	...	...	...	...	1896
8,08,405	49,11,956	5,60,764	...	...	33,457	...	...	...	...	...	...	...	33,457	1897
8,08,405	48,66,514	4,23,362	...	...	1,25,646	...	...	...	...	...	...	...	1,25,646	1898
8,08,405	51,02,708	9,26,315	...	...	4,44,495	...	...	38,187	...	...	...	5,53,228	10,35,910	1899
8,08,405	54,70,849	5,89,959	...	...	7,33,467	...	...	8,16,407	...	...	...	13,18,465	28,68,339	1900
8,08,405	56,62,368	21,60,756	...	...	8,40,594	...	34,303	30,59,022	...	9,41,785	...	34,86,993	83,58,694	1901
8,08,405	60,59,990	6,49,525	87,503	1,42,681	8,88,133	6,01,558	‡	75,81,838	1,61,037	53,17,680	8,332	92,81,656	2,40,70,418	1902

‡ Information not available.

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS : OF RAILWAYS.	ASSISTED										
GAUGE.	5′ 6″										
Class : No.	1 (b)										
Railway.	DELHI-UMBALLA-KALKA.								SOUTH		
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from Government. (6)	Total Income. (4) + (6) (7)	Percentage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.
1879	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...
1889	...	58,90,335	...	...	...	...	...	...	...	...	...
1890	...	1,35,55,580	...	...	...	...	...	...	...	...	...
1891	162	1,55,44,692	9,07,697	4,72,002	3·04	...	4,72,002	3·04	...	...	...
1892	162	1,58,22,137	10,81,769	5,62,520	3·56	...	5,62,520	3·56	...	...	...
1893	162	1,55,24,690	11,98,508	6,23,224	4·01	...	6,23,224	4·01	...	...	...
1894	162	1,55,25,547	31,37,526	6,95,514	4·48	...	6,95,514	4·48	...	...	...
1895	162	1,55,06,120	14,60,519	7,59,470	4·90	...	7,59,470	4·90	...	5,17,988	...
1896	161	1,54,49,783	13,18,840	6,85,797	4·44	...	6,85,797	4·44	...	30,88,026	...
1897	162	1,53,26,585	15,73,319	8,18,126	5·34	...	8,18,126	5·34	...	62,72,345	...
1898	162	1,53,43,587	16,02,512	8,35,906	5·45	...	8,35,906	5·45	...	97,45,791	...
1899	162	1,53,01,272	14,49,378	7,29,541	4·77	...	7,29,541	4·77	79	1,18,16,730	2,03,32
1900	162	1,53,15,467	13,72,523	7,13,712	4·66	...	7,13,712	4·66	79	1,23,15,110	4,67,13
1901	162	1,52,92,648	18,05,858	9,39,046	6·14	...	9,39,046	6·14	79	1,23,66,533	5,14,870
1902	162	1,54,23,791	18,66,695	9,70,681	6·29	...	9,70,681	6·28	79	1,19,88,612	4,99,809

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Bikaner	85
Bina-Goona-Baran	75
Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultanpur	58
Burma	48
Cherra-Companyganj	53
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income derived by railways which are not guaranteed by the State.

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COMPANIES.										CLASS : OF RAILWAYS.
5' 6"										GAUGE.
1 (*c*)					1 (*d*)					Class : No.
BEHAR.					TARKESSUR.					Railway.
Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate from E. I. Ry. (6)	Total income (4) + (6) (7)	Percentage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	22	16,88,995	2,62,313	1,24,424	7·37	1885
...	...	...	...	...	22	17,24,717	2,49,003	1,19,136	6·91	1886
...	...	...	...	...	22	17,28,410	2,63,792	1,32,174	7·65	1887
...	...	...	...	...	22	17,34,822	2,79,717	1,36,780	7·88	1888
...	...	...	...	...	22	17,28,138	2,84,895	1,36,578	7·90	1889
...	...	...	...	...	22	17,28,778	2,86,526	1,44,283	8·35	1890
...	...	...	...	...	22	17,29,021	3,05,132	1,63,478	9·45	1891
...	...	...	...	...	22	17,32,567	2,93,674	1,54,837	8·94	1892
...	...	...	...	...	22	17,47,280	2,83,051	1,50,420	8·61	1893
...	...	...	...	...	22	17,47,840	3,06,159	1,56,469	8·95	1894
...	...	...	...	...	22	17,53,340	3,08,156	1,59,091	9·07	1895
...	...	...	...	...	22	17,56,898	3,33,243	1,57,005	8·95	1896
...	...	...	...	...	22	17,57,160	3,12,656	1,62,563	9·25	1897
...	...	...	...	...	22	17,77,085	3,14,056	1,58,461	8·92	1898
1,32,163	1·12	33,403	1,65,566	1·40	22	17,84,166	3,08,759	1,52,491	8·55	1899
3,03,636	2·47	1,44,404	4,48,040	3·64	22	17,84,166	3,32,965	1,61,132	9·03	1900
3,08,822	2·59	1,28,082	4,36,904	3·53	22	17,92,293	3,30,390	1,57,828	8·81	1901
2,74,895	2·29	1,35,445	4,10,340	3·42	22	17,91,612	3,28,510	1,53,348	8·56	1902

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Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern-Mahratta	44
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAIL-WAYS.	ASSISTED															
GAUGE.	5' 6"															
Class: No.	6 (*b*)								8 (*b*)							
Railway.	SOUTHERN PUNJAB.								TAPTI VALLEY.							
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate from N. W. Ry. (6)	Total income. (4)+(6) (7)	Percentage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate from B. B. & C. I. (6)	Total income (4) + (6). (7)	Percent of (7) on (2). (8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1895	...	21,49,441	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1896	...	1,30,67,048	...	...	...	...	...	...	...	8,390	...	...	...	...	...	...
1897	400	1,99,08,812	1,03,641	49,748	0·25	21,579	71,327	0·36	...	20,96,294	...	...	...	...	...	...
1898	400	2,23,62,921	13,96,774	6,70,451	3·00	66,922	7,37,373	3·30	36	6,04,45,413	2,836	*	...	...	*	...
1899	424	2,26,68,262	13,82,094	6,63,406	2·93	1,37,293	8,00,699	3·53	139	1,21,09,133	2,42,593	*	...	...	*	...
1900	424	2,26,57,063	16,23,788	7,79,418	3·44	13,504	7,92,922	3·50	155	1,28,31,291	6,68,475	†	...	...	†	...
1901	424	2,25,70,734	29,85,680	14,35,804	6·36	+1,96,207	12,39,597	5·49	155	1,29,18,730	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90
1902	425	2,27,93,660	19,85,122	9,52,859	4·18	—2,270	9,50,589	4·17	155	1,29,70,581	8,26,485	4,63,242	3·57	45,196	5,08,438	3·92

* Credited to interest on capital.

† The net earnings for the first-half of 1900 were credited to interest on Capital and those for the second-half of 1900 (including rebate)

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Hyderabad-Godávari Valley	80
Indian Midland	38
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Jamnagar	86
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DIX 7—*continued.*

income derived by railways which are not guaranteed by the State.

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COMPANIES—(*contd*).								CLASS OF RAILWAYS.
3′ 3⅜″								GAUGE.
2 (*d*)								Class : No.
MYMENSINGH-JAMALPUR-JAGANNATHGANJ.								Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate from E. B. Ry. (6)	Total income (4) + (6). (7)	Percentage of (7) on (2). (8)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		
...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	1892
...	...	...	...	...	...	...	...	1893
...	...	...	...	...	...	...	...	1894
...	...	...	...	...	...	...	...	1895
...	1,950	...	...	...	...	...	...	1896
...	5,54,688	...	...	...	...	...	...	1897
33	10,44,638	7,660	4,213	0·40	...	4,213	0·40	1898
53	16,11,248	66,499	36,575	2·27	...	36,575	2·72	1899
53	18,78,395	1,62,028	89,116	4·74	...	89,116	4·74	1900
53	20,84,346	1,67,756	92,265	4·43	...	92,265	4·43	1901
53	22,85,677	2,05,251	1,12,888	4·94	...	1,12,888	4·94	1902

treated as a set off against the charge to Capital for interest in the accounts for the first half of 1901.

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Petlad-Cambay (Anand-Tarapur section)	77
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South Indian	41
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	ASSISTED															
GAUGE.	3' 3⅜"															
Class: No.	8 (i)								10 (e)							
Railway.	AHMEDABAD-PARANTIJ.								NILGIRI.							
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate from B., B. & C. I. Ry. (6)	Total income (4) + (6). (7)	Per cent. of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from Government. (6)	Total income (4) + (6). (7)	Percentage of (7) on (2). (8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	67,350	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	2,89,134	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	8,89,751	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	15,50,000	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	18,50,000	...	...	...	...	...	...
1895	...	...	...	...	...	...	...	...	...	22,60,000	...	...	...	...	...	...
1896	...	13,12,752	...	...	...	...	...	...	...	18,92,610	...	...	...	...	...	...
1897	55	19,42,211	69,069	36,665	1·89	...	36,665	1·89	...	36,84,977	...	...	...	...	...	...
1898	55	19,42,971	1,49,790	85,836	4·42	...	85,836	4·42	...	44,54,085	...	...	...	...	...	...
1899	55	19,49,616	2,10,634	1,12,687	6·24	...	1,12,687	6·24	17	47,89,944	84,448	20,209	0·42	24,392	44,600	0·93
1900	55	19,55,305	2,65,105	1,55,952	7·98	...	1,55,952	7·98	17	48,96,490	1,76,032	86,642	1·77	23,006	1,19,648	2·44
1901	55	19,49,355	1,77,438	99,365	5·10	...	99,365	5·10	17	48,74,254	2,41,336	1,37,883	2·83	...	1,37,883	2·83
1902	55	19,70,012	1,79,794	1,00,685	5·11	...	1,00,685	5·11	17	49,08,431	3,09,063	1,12,111	2·28	...	1,12,111	2·28

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Bikaner	85
Bina-Goona-Baran	75
Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultanpur	58
Burma	48
Cherra-Companyganj	53
Cooch Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kalka	62
Deoghur	69
Dhond-Manmad	37
Dhrangadra	87
Dibru-Sadiya	68
Eastern Bengal State	50
East Coast State	50
East Indian	34
Gaekwar's Dabhoi	82
Gaekwar's Mehsana	79
Great Indian Peninsula	36
Guntakal-Mysore Frontier	45
Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yesvantpur-Mysore-Frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
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DIX 7—*continued.*

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

COMPANIES—(*contd.*)													CLASS: OF RAILWAYS.
3′ 3⅜″													GAUGE.
12 (*a*)								12 (*b*)					CLASS: No.
BENGAL DOOARS.								BENGAL DOOARS EXTENSIONS.					Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (2) on (4). (5)	Subsidy from District Board. (6)	Total income. (4) + (6). (7)	Percentage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	...	...	...	1890
...	16,479	...	...	...	...	...	...	...	...	...	...	...	1891
...	12,67,626	...	...	...	...	...	...	...	...	...	...	...	1892
32	18,49,091	1,14,812	57,639	3·12	...	57,639	3·12	...	...	...	...	...	1893
36	22,84,224	2,05,286	1,04,291	4·57	4,000	1,44,291	6·32	...	...	...	...	...	1894
36	23,26,476	3,53,537	1,27,458	5·48	4,000	1,31,458	5·65	...	...	...	...	...	1895
36	24,33,213	2,70,450	1,31,813	5·42	...	1,31,813	5·42	...	...	...	...	...	1896
36	26,50,713	2,86,407	1,45,289	5·48	...	1,45,289	5·48	...	72,151	...	...	...	1897
36	26,68,050	2,69,089	1,10,620	4·15	4,000	1,14,620	4·30	...	4,03,611	...	...	...	1898
36	26,26,748	2,73,037	1,18,416	4·51	...	1,18,416	4·51	...	26,75,455	...	...	...	1899
36	26,42,695	3,32,730	1,89,461	7·17	...	1,89,461	7·17	66	47,11,632	16,191	5,015	0·11	1900
36	26,44,873	3,10,920	1,76,399	6·67	...	1,76,399	6·67	74	62,26,567	1,76,399	68,937	1·11	1901
36	26,50,627	2,73,340	1,71,455	6·47	...	1,71,455	6·47	78	72,66,166	2,53,634	86,266	1·19	1902

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Madras	56
Madras (North-East line)	40
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannathganj	65
Mysore-Nanjangud	82
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Nagda-Ujjain	76
Nilgiri	54
Nizam's Guaranteed State	88
North Western State	78
Oudh and Rohilkhand State	82
Palanpur-Deesa (State portion)	68
Palanpur-Deesa (Darbar portion)	43
Petlad-Cambay (Anand-Tarapur section)	84
Petlad-Cambay (Tarapur-Cambay section)	56
Pondicherry	40
Powayan Light	47
Rajpipla	87
Rajpura-Bhatinda	65
Rajputana-Malwa	82
Ranaghat-Krishnagar	44
Rohilkund and Kumaon	76
Sagauli-Raxaul	66
Shoranur-Cochin	78
South Behar	52
South Indian	51
Southern Mahratta	41
Southern Punjab	77
Tanjore District Board (Mayavaram-Mutupet)	77
Tapti Valley	77
Tarakeshwar-Magra	89
Tarkessur	70
Tezpur-Balipara	83
Tirhoot State	83
Udaipur-Chitor	40
Vijapur-Kalol Kadi	72
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

ASSISTED

CLASS: OF RAILWAYS.													
GAUGE.	3' 3⅜"												
Class: No.	13 (a)								13 (b)				
Railway.	DIBRU-SADIYA.								LEDO AND TIKAK-MARGHERITA COLLIERY.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from local Government. (6)	Total Income. (4) + (6) (7)	Per cent. of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	38	22,22,253	48,220	—35,375	...	...	—35,375	...	...	...	...	...	...
1884	69	40,65,288	2,06,133	—68,406	...	54,550	—13,856	...	...	...	...	...	...
1885	77	49,46,729	2,57,335	—63,364	...	54,500	—9,364	...	...	...	...	...	...
1886	77	49,73,753	3,46,479	53,154	1·07	54,654	1,07,808	2·17	...	...	...	...	...
1887	77	53,32,605	4,04,928	1,02,540	1·92	1,00,000	2,02,540	3·80	...	...	...	...	...
1888	77	53,73,445	4,25,530	1,01,759	1·89	1,00,000	2,01,759	3·75	...	...	...	...	...
1889	77	55,18,750	4,64,018	1,25,147	2·27	1,00,000	2,25,147	4·08	...	...	...	...	...
1890	77	57,06,682	5,14,266	1,76,960	3·10	1,00,000	2,76,960	4·85	...	...	...	...	...
1891	77	67,05,474	4,98,682	1,70,526	2·54	1,00,000	2,70,526	4·03	...	...	...	...	...
1892	77	69,56,304	5,13,213	1,63 719	2·35	1,00,000	2,63,719	3·79	...	...	...	...	...
1893	77	71,70,562	5,12,098	1,52,972	2·13	1,00,000	2,52,972	3·53	...	...	...	...	...
1894	77	70,97,487	5,31,645	1,95,732	2·76	1,00,000	2,95,732	4·17	...	...	...	...	...
1895	77	74,02,729	6,01,142	2,69,543	3·64	1,00,000	2,69,543	4·99	...	...	...	...	...
1896	77	74,01,496	6,47,360	3,12,286	4·22	1,00,000	4,12,286	5·57	...	...	...	...	...
1897	77	74,20,119	7,73,189	2,64,759	3·57	1,00,000	3,64,759	4·92	10	11,46,240	45,871	8,924	0·70
1898	77	74,40,474	7,81,415	2,82,478	3·80	50,000	3,32,478	4·33	8	12,00,698	55,313	3,752	0·31
1899	77	74,56,183	8,59,414	4,49,688	6·03	*37,978	4,87,666	6·54	8	12,83,416	63,084	22,053	1·72
1900	77	77,14,349	9,00,847	4,62,381	5·99	...	4,62,381	5·99	8	12,84,375	65,724	17,981	1·40
1901	77	82,00,747	9,28,578	4,73,307	5·77	...	4,73,307	5·77	11	16,30,162	70,293	11,145	0·68
1902	77	82,00,694	8,51,880	4,11,187	5·01	...	4,11,187	5·01	11	16,53,446	58,259	437	0·03

* Subsidy due for previous period

† Credited to interest

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Darjeeling-Himalayan	73
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Hindupur (Yesvantpur-Mysore frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
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)IX 7—*continued.*

Appendix 7.
Gain or loss.

:come derived by railways which are not guaranteed by the State.

1, 14, 45 and 46 of report)

MPANIES—(*contd.*)														CLASS OF RAILWAYS.
					3′ 3⅜″									Gauge.
15 (*a*)					16 (*a*)					16 (*c*)				Class No.
DEOGHUR.					BENGAL AND NORTH-WESTERN					SAGAULI-RAXAUL.				Railway.
...open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Length of line open.	Capital outlay.	Grosss earning.	Net traffic earnings.	Percent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
...es.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
5	2,73,331	19,639	6,242	2·28	...	...	...	...	...	...	...	...	...	...	1883
5	2,75,000	23,735	10,764	3·90	75	1,52,47,428	77,670	—26,221	...	...	...	...	...	...	1884
4	2,75,000	23,987	9,908	3·60	303	2,01,86,980	12,05,320	6,10,799	3·03	...	...	...	...	...	1885
5	2,75,042	25,017	11,743	4·27	376	2,36,16,102	18,54,074	8,05,189	3·43	...	...	...	...	...	1886
5	2,75,043	24,532	12,108	4·40	376	2,56,22,684	19,44,002	8,37,004	3·27	...	...	...	...	...	1887
5	2,81,180	25,812	11,521	4·10	376	2,61,51,593	22,09,553	9,88,844	3·78	...	...	...	...	...	1888
5	2,82,876	28,533	12,695	4·49	376	2,63,41,872	22,11,824	10,53,964	4·00	...	...	...	...	...	1889
5	2,82,616	26,095	10,915	3·86	376	2,57,94,904	22,18,615	12,52,397	4·86	...	...	...	...	...	1890
5	2,82,752	31,165	15,429	5·46	401	2,76,68,842	24,76,909	16,23,993	5·87	...	...	...	...	...	1891
5	2,88,329	26,964	9,707	3·37	414	2,83,88,821	29,39,077	17,01,254	5·99	...	...	...	...	...	1892
5	2,87,364	37,809	19,103	6·65	414	2,84,84,234	26,14,546	16,43,702	5·79	...	...	...	...	...	1893
5	2,87,526	29,425	9,659	3·36	414	2,87,24,887	26,17,242	17,67,623	6·15	...	...	...	...	...	1894
5	2,88,086	33,611	15,308	5·31	414	3,12,95,704	25,71,036	17,55,675	5·61	...	...	...	...	...	1895
5	2,87,797	30,014	11,498	4·00	479	2,43,36,114	26,26,033	17,41,786	5·07	...	1,26,644	...	...	...	1896
5	2,87,942	30,320	11,152	3·87	485	4,10,32,207	27,55,718	17,99,182	4·38	...	6,68,783	...	...	...	1897
5	2,88,453	32,100	6,601	2·28	586	4,66,78,322	33,31,890	20,50,805	4·39	...	8,07,550	...	...	...	1898
5	2,87,525	33,262	6,678	2·32	743	5,16,06,763	43,44,861	27,32,851	5·30	18	10,81,740	5,433	†	...	1899
5	2,87,379	34,900	7,376	2·56	743	5,24,73,019	44,56,593	25,28,996	4·82	18	12,12,073	25,830	†	...	1900
5	2,83,265	48,293	18,616	6·53	743	5,50,91,830	53,66,794	31,74,225	5·76	18	10,67,014	37,182	13,593	1·27	1901
5	2,75,738	29,758	6,025	2·19	748	5,84,82,525	55,60,238	30,48,854	5·21	18	10,73,421	39,296	18,638	1·74	1902

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	ASSISTED.													
GAUGE.	3' 3⅜"								2' 6"					
Class: No.	17 (a)								17 (c)					
Railway.	ROHILKUND AND KUMAON.								POWAYAN LIGHT.					
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent of (4) on (2).	Subsidy from Government.	Total income. (4) + (5).	Per cent. of (7) on (2).	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	
1884	54	19,40,266	36,543	1,734	0·09	...	1,734	0·09	...	...	...	...	...	
1885	54	21,71,124	2,38,572	40,153	1·85	40,000	80,153	3·69	...	...	...	...	...	
1886	55	22,52,962	3,00,191	83,832	3·72	40,000	1,23,832	5·50	...	...	...	...	...	
1887	55	22,91,619	3,19,274	76,800	3·35	40,000	1,16,800	5·10	...	...	...	...	...	
1888	55	23,40,100	3,34,092	1,02,120	4·36	40,000	1,42,120	6·07	...	...	...	...	...	
1889	55	23,96,624	3,72,270	1,20,135	5·01	40,000	1,60,135	6·69	...	...	...	...	...	
1890	55	20,37,223	3,14,834	1,11,003	5·45	40,000	1,51,003	7·41	...	...	...	...	...	
1891	54	20,49,458	3,85,084	1,33,440	5·62	20,000	1,53,440	7·49	...	...	...	...	...	
1892	54	20,58,575	5,20,567	1,57,780	6·82	40,000	1,97,780	9·61	...	...	...	...	...	
1893	54	20,82,280	4,25,909	1,43,180	6·17	40,000	1,83,180	8·80	...	...	...	...	...	
1894	54	20,80,440	4,59,315	1,75,191	7·16	40,000	2,15,191	10·34	...	...	...	...	...	
1895	54	20,78,251	4,04,504	1,52,973	7·36	...	1,52,973	7·36	...	...	...	...	...	
1896	54	20,79,863	4,26,905	1,54,595	7·43	...	1,54,595	7·43	...	...	...	...	...	
1897	54	21,20,428	4,23,720	1,73,184	8·17	...	1,73,184	8·17	...	...	...	...	...	
1898	54	21,42,552	4,62,308	2,21,899	10·36	...	2,21,899	10·36	...	...	...	...	...	
1899	54	21,48,313	4,65,623	2,34,020	10·89	...	2,34,020	10·89	...	...	...	...	...	
1900	54	21,53,125	4,37,572	2,28,048	10·59	...	2,28,048	10·59	...	...	...	...	...	
1901	54	22,09,423	3,84,314	2,09,896	9·50	...	2,09,896	9·50	40	8,41,038	66,862	20,059	2·39	
1902	54	23,36,911	4,10,626	2,18,317	9·37	...	2,18,317	9·34	40	8,93,456	75,675	22,521	2·52	

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income derived by railways which are not guaranteed by the State.

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COMPANIES—(*contd.*)

CLASS OF RAILWAYS.

GAUGE. 2′ 6″

Railway. 25 (*a*) BARSI. | 26 (*a*) TARAKESHWAR-MAGRA.

Class: No.

Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	...	...	1892
...	...	...	...	...	...	...	...	...	...	1893
...	...	...	...	...	...	...	...	...	...	1894
...	2,357	...	...	...	...	...	...	...	...	1895
...	10,06,657	...	...	...	...	...	...	...	...	1896
22	13,43,891	1,07,778	21,360	1·60	...	...	...	...	...	1897
22	13,42,592	1,30,321	24,559	1·83	31	9,44,627	74,074	21,002	2·22	1898
22	13,56,809	1,56,118	64,475	4·75	31	9,62,446	66,168	12,192	1·27	1899
22	13,56,501	1,24,440	42,440	3·13	31	9,61,811	76,594	20,961	2·18	1900
22	12,99,589	1,68,238	79,588	6·13	31	9,72,175	83,150	19,890	2·04	1901
22	13,18,242	1,50,275	52,879	4·02	31	9,76,194	84,272	24,842	2·54	1902

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Rohilkund and Kumaon	70
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Shoranur-Cochin	80
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	ASSISTED															
GAUGE.	2' 6"															
Class : No.	27 (a)								28 (a)							
Railway.	RANAGHAT-KRISHNAGAR.								TEZPUR-SALIPARA.							
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from District Board. (6)	Total income (4) + (6). (7)	Percentage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from District Board. (6)	Total income (4) + (6). (7)	Percent. of (7) on (2). (8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...
1887	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1895	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1897	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1898	...	7,22,369	...	...	...	...	...	...	20	4,56,927	85,745	20,157	4·41	5,000	25,157	5·51
1899	20	7,27,809	46,348	8,415	1·16	12,352	20,767	2·85	20	4,74,177	95,157	26,156	5·52	5,000	31,156	6·57
1900	20	7,51,809	69,302	19,442	2·59	9,472	28,914	3·85	20	4,87,240	95,981	25,797	5·29	5,000	30,797	6·32
1901	20	7,51,157	69,117	15,185	2·02	1,465	16,650	2·22	20	4,87,240	83,840	16,898	3·47	5,000	21,898	4·49
1902	20	7,51,158	76,180	21,353	2·84	15,960	37,313	4·97	20	4,87,240	85,012	21,651	4·43	5,000	26,651	5·47

* Due to re-payments to Government by the Railway Company on account
† Share of profits exceeding 4 per cent.

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income derived by railways which are not guaranteed by the State.

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COMPANIES—(*contd.*)

Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from local Government.	Total income (4) + (6).	Per cent. of (7) on (7).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from District Board.	Total income (4) + (6).	Per-cent. of (7) on (2).	Calendar year.
CLASS: OF RAILWAYS.																
GAUGE.	2′ 0″							2′ 0″								
Class: No.	29 (*a*)							30 (*a*)								
Railway.	DARJEELING-HIMALAYAN.							HOWRAH-AMTA.								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles	Rs.	Rs.	Rs.		Rs.	Rs.		
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
30	14,33,681	...	34,197	2·39	...	34,197	2·39	...	...	...	...	...	...	...	...	1880
50	18,18,723	2,61,154	1,15,522	6·35	...	1,15,522	6·35	...	...	...	...	...	...	...	...	1881
50	23,56,112	3,66,474	89,045	3·78	...	89,045	3·78	...	...	...	...	...	...	...	...	1882
50	26,04,304	4,21,944	1,55,725	5·98	...	1,55,725	5·98	...	...	...	...	...	...	...	...	1883
51	27,23,210	4,35,024	1,46,725	5·39	...	1,46,725	5·39	...	...	...	...	...	...	...	...	1884
51	27,27,823	4,31,103	1,63,350	5·99	...	1,63,350	5·99	...	...	...	...	...	...	...	...	1885
51	27,32,136	4,56,476	2,42,109	8·86	...	2,42,109	8·86	...	...	...	...	...	...	...	...	1886
51	27,43,214	4,77,151	2,10,623	7·68	...	2,10,623	7·68	...	...	...	...	...	...	...	...	1887
51	27,71,926	6,14,893	2,83,327	10·22	...	2,83,327	10·22	...	...	...	...	...	...	...	...	1888
51	29,40,423	5,74,294	2,29,117	7·80	...	2,29,117	7·80	...	...	...	...	...	...	...	...	1889
51	29,52,108	5,76,416	2,32,894	7·89	...	2,32,894	7·89	...	...	...	...	...	...	...	...	1890
51	30,59,693	6,13,387	2,58,253	8·44	...	2,58,253	8·44	...	...	...	...	...	...	...	...	1891
51	31,09,079	6,35,778	2,66,647	8·57	...	2,66,647	8·57	...	...	...	...	...	...	...	...	1892
51	31,72,223	6,34,481	2,83,903	8·50	−1,55,418	1,27,485	4·02	...	...	...	...	...	...	...	...	1893
51	31,77,536	6,36,284	2,56,286	8·10	−29,756	2,26,530	7·13	...	...	...	...	...	...	...	...	1894
51	31,99,765	7,39,618	3,59,933	11·25	−61,740	2,98,193	9·32	...	...	...	...	...	...	...	...	1895
51	33,12,732	7,81,894	3,59,667	10·25	−62,087	2,97,580	8·98	...	...	...	...	...	...	...	...	1896
51	33,15,455	7,44,266	3,33,188	10·05	−55,929	2,77,259	8·36	...	...	...	...	...	...	...	...	1897
51	33,65,993	7,54,580	3,41,109	10·13	−59,432	2,81,667	8·37	29	11,24,713	1,89,519	78,910	7·02	†15,062	63,848	5·68	1898
51	35,08,469	7,14,985	2,49,770	7·12	−34,933	2,14,837	6·12	29	11,41,307	2,50,763	1,12,794	9·88	−27,835	84,959	7·44	1899
51	34,99,487	8,09,158	3,61,840	10·34	...	3,61,840	10·34	29	11,88,283	2,56,418	1,23,194	10·36	−30,244	92,860	7·81	1900
51	34,78,411	7,87,941	3,13,618	9·02	...	3,13,618	9·02	29	11,96,697	2,60,530	1,14,082	9·53	−26,146	87,936	7·35	1901
51	34,96,507	8,50,280	3,78,005	10·18	611	3,78,616	10·83	29	12,68,532	2,65,497	1,33,120	10·49	−29,703	1,03,417	8·15	1902

of the up-keep and maintenance of the cart road utilized by the railway.
per *annum* paid to District Board.

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Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	ASSISTED COMPANIES—(*concluded.*)								TOTAL ASSISTED COMPANIES.							
GAUGE.	2' 0"															
Class: No.	31 (a)															
Railway.	HOWRAH-SHEAKHALA.															
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from District Board. (6)	Total income (4) + (6). (7)	Percent. of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Rebate and subsidy. (6)	Total income (4) + (6). (7)	Percent. of (7) on (2). (8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	30	14,33,681	...	34,197	2'39	...	34,197	2'39
1881	...	...	...	...	...	...	...	...	50	18,18,723	2,61,154	1,15,522	6'35	...	1,15,522	6'35
1882	...	...	...	...	...	...	...	...	65	23,56,112	3,66,474	89,045	3'78	...	89,045	3'78
1883	...	...	...	...	...	...	...	...	93	50,99,888	4,89,803	1,26,592	2'48	...	1,26,592	2'48
1884	...	...	...	...	...	...	...	...	254	2,42,51,222	7,79,105	64,536	0'27	54,550	1,19,086	0'49
1885	...	...	...	...	...	...	...	...	511	3,19,96,651	24,18,630	8,84,770	2'77	94,500	9,79,270	3'06
1886	...	...	...	...	...	...	...	...	586	3,35,74,712	32,71,240	13,19,163	3'71	94,654	14,13,817	4'21
1887	...	...	...	...	...	...	...	...	586	3,79,93,575	34,33,679	13,71,349	3'60	1,40,000	15,11,349	3'98
1888	...	...	...	...	...	...	...	...	586	3,86,53,066	38,89,597	16,24,351	4'20	1,40,000	17,64,351	4'56
1889	...	...	...	...	...	...	...	...	586	4,30,99,018	39,35,834	16,77,636	3'72	1,40,000	18,17,636	4'03
1890	...	...	...	...	...	...	...	...	586	5,21,25,741	39,36,772	19,28,452	3'70	1,40,000	20,68,452	3'97
1891	...	...	...	...	...	...	...	...	772	5,73,45,345	52,18,056	28,37,121	4'95	1,20,000	29,57,121	5'25
1892	...	...	...	...	...	...	...	...	785	6,05,13,189	60,11,042	30,16,464	4'98	1,40,000	31,56,464	5'22
1893	...	...	...	...	...	...	...	...	817	6,18,67,634	58,20,914	30,79,143	4'98	—15,418	30,63,725	4'95
1894	...	...	...	...	...	...	...	...	821	6,27,75,487	61,22,882	33,60,765	5'35	1,14,244	34,75,009	5'54
1895	...	...	...	...	...	...	...	...	821	6,87,80,257	64,72,123	35,99,451	5'23	42,260	36,41,711	5'30
1896	...	...	...	...	...	...	...	...	884	8,73,61,373	64,41,439	35,54,447	4'06	37,913	35,92,360	4'13
1897	...	...	...	...	...	...	...	...	1,379	11,16,01,001	72,26,954	38,23,431	3'43	65,650	38,89,081	3'48
1898	20	6,09,398	76,166	16,768	2'75	4,267	21,035	3'45	1,647	13,29,13,320	97,21,148	49,33,527	3'71	55,695	49,89,222	3'75
1899	20	6,09,434	73,396	21,453	3'52	—250 *	21,203	3'48	2,085	14,99,76,965	1,13,95,382	59,06,032	3'94	1,87,400	60,93,432	4'63
1900	20	6,09,446	76,019	26,824	4'40	—999 *	25,825	4'24	2,167	15,49,66,511	1,28,46,348	63,49,274	4'10	1,64,143	65,13,417	4'20
1901	20	6,09,446	75,579	23,165	3'80	1,108	24,263	3'98	2,218	16,08,40,527	1,57,41,920	82,61,859	5'14	—53,472	82,08,387	5'13
1902	20	6,09,565	82,019	31,739	5'20	—550	31,189	5'12	2,228	16,58,72,798	1,53,46,970	78,03,874	4'70	1,87,689	79,91,563	4'82

* Share of profits exceeding 4 per cent. per *annum* paid to District Board.

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Hindupur (Yesvantpur-Mysore frontier)	81
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income derived by railways which are not guaranteed by the State.

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LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.															CLASS: OF RAILWAYS.
5' 6"															GAUGE.
7 (*b*)					7 (*c*)					7 (*e*)					Class: No.
KHAMGAON.					AMRAOTI.					BINA-GOONA-BARAN.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
8	5,35,617	38,086	—266	...	6	4,77,043	69,904	16,175	3·39	...	...	...	...	...	1879
8	5,19,888	27,363	4,922	0·94	6	4,45,585	50,866	3,639	0·82	...	...	...	...	...	1880
8	4,94,271	41,506	4,561	0·92	6	4,45,663	53,934	34,424	7·72	...	...	...	...	...	1881
8	4,91,164	75,966	30,389	6·19	6	4,44,651	85,147	39,535	8·89	...	...	...	...	...	1882
8	4,90,996	62,657	22,469	4·58	6	4,44,860	96,160	44,387	9·98	...	...	...	...	...	1883
8	4,90,903	46,830	13,037	2·66	6	4,44,774	76,782	34,174	7·68	...	...	...	...	...	1884
8	4,90,739	41,363	11,020	2·25	6	4,44,730	80,803	34,447	7·75	...	...	...	...	...	1885
8	4,89,613	59,452	20,233	4·13	6	4,44,686	95,131	44,137	9·93	...	...	...	...	...	1886
8	4,89,186	53,479	16,990	3·47	5	4,44,308	88,157	35,855	8·07	...	...	...	...	...	1887
8	4,88,357	52,635	15,796	3·23	5	4,43,892	81,710	30,886	6·96	...	...	...	...	...	1888
8	4,90,911	65,372	22,528	4·59	5	4,45,615	1,02,023	41,671	9·35	...	...	...	...	...	1889
8	4,90,520	55,288	26,092	5·32	5	4,45,155	1,01,502	46,254	10·39	...	...	...	...	...	1890
8	4,90,408	66,675	32,620	6·65	5	4,49,395	1,12,909	53,393	11·88	...	51,905	...	...	...	1891
8	4,89,132	65,548	30,909	6·32	5	4,50,160	1,05,762	48,637	10·80	...	2,57,611	...	...	...	1892
8	4,87,567	21,697	21,997	4·51	5	4,49,998	43,941	43,056	9·57	...	35,18,701	...	...	...	1893
8	4,86,003	21,966	21,667	4·46	5	4,49,461	42,795	41,910	9·32	...	47,29,618	...	...	...	1894
8	5,20,947	26,031	26,031	5·00	5	4,49,988	39,137	38,252	8·50	72	49,81,035	...	...	...	1895
8	5,22,603	24,446	24,446	4·68	5	4,51,119	43,756	42,871	9·50	72	54,16,074	91,140	36,821	0·68	1896
8	5,22,150	13,901	13,901	2·66	5	4,52,445	30,746	29,862	6·60	72	87,73,621	1,02,386	43,446	0·50	1897
8	5,22,150	24,326	24,326	4·66	5	4,54,498	40,057	39,172	8·62	72	97,66,068	1,30,004	58,040	0·59	1898
8	5,22,150	14,850	14,850	2·84	5	4,54,417	33,099	32,214	7·09	145	99,31,680	2,67,359	1,26,108	1·27	1899
8	5,22,150	33,783	13,924	2·67	5	4,54,418	78,532	32,436	7·14	146	1,00,21,605	4,34,847	2,20,490	2·20	1900
8	5,22,150	49,378	23,337	4·47	5	4,51,915	1,08,578	50,237	11·12	146	1,00,43,286	2,52,716	1,22,970	1·22	1901
†	†	‡32,968	‡17,209	...	†	†	‡79,582	‡41,099	...	146	99,14,442	2,38,825	1,19,792	1·21	1902

† Included with the Great Indian Peninsula railway.

‡ For the first-half of 1902.

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Rajpipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	76
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS	LINES OWNED BY NATIVE STATES														
GAUGE.	5' 6"														
Class: No.	7 (f)					7 (g)					8 (c)				
Railway.	BHOPAL-UJJAIN.					BHOPAL-ITARSI (NATIVE STATE SECTION).					NAGDA-UJJAIN.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	34,60,091	14,376	2,704	0·08	...	...	...	...	...
1883	...	...	...	...	...	...	38,23,236	25,573	—9,135	...	...	...	...	...	...
1884	...	...	...	...	...	44	45,83,261	28,109	—5,152	...	...	...	...	...	...
1885	...	...	...	...	...	44	47,71,375	1,04,683	—14,789	...	...	...	...	...	...
1886	...	...	...	...	...	44	48,26,036	1,47,416	—12,501	...	...	...	...	...	...
1887	...	...	...	...	...	44	48,09,939	1,85,576	14,813	0·31	...	...	...	...	...
1888	...	...	...	...	...	44	48,01,701	1,86,548	18,072	0·38	...	...	...	...	...
1889	...	...	...	...	...	44	48,40,846	2,67,936	—18,351	...	...	...	...	...	...
1890	...	...	...	...	...	44	50,00,000	2,97,049	—56,093	...	...	...	...	...	...
1891	...	...	...	...	...	44	50,00,000	4,66,431	1,73,154	3·46	...	...	...	...	...
1892	...	88,462	...	...	...	44	50,00,000	4,47,797	1,65,883	3·32	...	...	...	...	...
1893	...	22,76,863	...	...	...	44	50,00,000	4,24,236	1,30,925	2·62	...	...	...	...	...
1894	...	53,53,849	...	...	...	44	50,00,000	3,80,217	1,44,679	2·89	...	...	...	...	...
1895	124	69,69,331	...	...	...	44	50,00,000	3,18,074	1,02,821	2·06	...	5,33,660	...	...	...
1896	114	77,77,604	3,69,114	1,80,218	2·32	44	50,00,000	3,61,363	1,38,532	2·77	35	20,71,251	40,701	17,762	0·86
1897	114	75,36,180	3,72,337	1,84,660	2·45	44	50,00,000	3,31,379	1,33,070	2·66	35	22,19,919	1,04,639	47,756	2·15
1898	114	75,85,789	4,16,940	2,05,051	2·70	44	50,00,000	4,17,010	1,71,375	3·43	34	22,31,596	1,29,627	71,509	3·20
1899	113	76,54,290	5,82,341	2,77,911	3·63	44	50,00,000	4,47,225	1,79,444	3·59	34	22,34,346	1,47,175	77,732	3·48
1900	113	76,88,020	9,46,349	4,65,681	6·06	44	50,00,000	7,90,489	2,67,288	5·35	34	22,29,753	2,51,783	1,20,956	5·42
1901	113	77,61,569	5,45,956	2,62,044	3·38	44	50,00,000	5,85,152	2,88,838	5·77	34	22,31,982	1,12,366	67,208	3·01
1902	113	78,02,855	5,82,063	2,92,357	3·75	44	50,00,000	6,30,030	3,16,683	6·33	34	22,39,663	1,57,211	85,851	3·83

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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

AND WORKED BY COMPANIES—(*contd*).

CLASS OF RAILWAYS.	5' 6"														
GAUGE.															
Class : No.	8 (*d*)					8 (*e*)					8 (*k*)				
Railway.	PETLAD-CAMBAY (ANAND-TARAPUR SECTION).					PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION).					PALANPUR-DEESA (DARBAR PORTION).				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	Mileage shown with Palanpur-Deesa (State portion).	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...		...	...	...	...
1888	...	11,030	...	...	...	...	...	...	...	...		...	...	...	...
1889	...	4,71,822	...	...	...	...	...	...	...	...		...	...	...	...
1890	13	6,47,922	32,649	20,870	3·22	...	...	...	...	...		...	...	...	...
1891	13	7,10,118	59,113	36,346	5·12	...	...	...	...	...		...	...	...	...
1892	13	7,11,081	61,243	34,757	4·89	...	...	...	...	...		20,000	...	...	...
1893	13	7,12,768	63,953	40,627	5·70	...	...	...	...	...		1,85,000	2,255	1,335	0·72
1894	13	7,23,482	69,668	44,037	6·09	...	...	...	...	...		1,85,000	17,381	11,365	6·14
1895	13	7,23,139	73,891	46,584	6·44	...	...	...	...	...		1,85,000	17,643	11,333	6·13
1896	13	7,23,616	1,17,540	82,847	11·45	...	...	...	...	...		1,85,000	22,864	14,101	7·62
1897	13	7,55,769	64,737	33,946	4·49	...	...	...	...	...		1,85,000	19,133	10,883	5·88
1898	13	7,49,047	51,121	28,256	3·76	...	...	...	...	...		1,85,000	16,893	10,334	5·59
1899	13	7,52,439	70,668	39,312	5·22	...	...	...	...	...		1,85,000	19,239	12,102	6·54
1900	13	7,52,097	88,481	41,713	5·55	...	...	...	...	...		1,85,000	21,084	14,238	7·70
1901	22	11,86,381	93,233	51,769	4·36	11	7,49,676	12,011	5,950	0·79		1,85,000	16,279	9,375	5·07
1902	22	11,85,930	1,05,951	56,818	4·79	11	7,49,676	25,497	13,622	1·81		1,85,000	14,777	8,329	4·50

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Powayan Light	70
Rajpipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	70
Sagauli-Raxaul	69
Shoranur-Cochin	80
South Behar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	LINES OWNED BY NATIVE STATES									
GAUGE.	5' 6"									
Class: No.	9 (a)					10 (c)				
Railway.	NIZAM'S GUARANTEED STATE.					KOLAR GOLD-FIELDS.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	121	1,16,46,997	6,94,401	89,925	0·77	...	...	...	...	...
1880	121	1,21,90,870	7,02,716	2,48,604	2·04	...	...	...	...	...
1881	121	1,22,85,191	7,56,834	2,88,666	2·35	...	...	...	...	...
1882	121	1,22,27,794	8,59,418	3,75,099	3·07	...	...	...	...	...
1883	121	1,22,83,560	8,53,521	2,37,932	1·94	...	...	...	...	...
1884	121	1,23,03,720	9,72,917	4,70,227	3·82	...	...	...	...	...
1885	121	2,05,60,998	11,13,950	4,87,024	2·37	...	...	...	...	...
1886	204	2,71,49,342	13,81,077	6,94,524	2·56	...	...	...	...	...
1887	295	2,69,71,143	15,48,891	5,52,905	2·05	...	...	...	...	...
1888	306	3,55,11,854	17,76,075	7,57,467	2·13	...	...	...	...	...
1889	330	3,59,46,922	22,57,462	7,72,513	2·15	...	...	...	...	...
1890	333	3,77,11,194	25,07,268	10,39,590	2·76	...	...	...	...	...
1891	333	3,95,18,791	27,76,437	12,57,860	3·18	...	...	...	...	...
1892	333	3,95,48,395	27,80,642	13,24,959	3·35	...	27,661	...	...	...
1893	332	4,01,96,909	30,61,605	14,36,451	3·57	...	5,27,634	...	...	...
1894	332	4,02,33,826	32,56,885	16,22,028	4·03	10	6,56,175	75,771	29,273	4·46
1895	332	4,06,43,818	32,15,541	15,77,149	3·88	10	6,61,654	1,52,953	66,379	10·03
1896	332	4,08,24,737	33,03,522	17,28,196	4·24	10	7,45,004	1,55,317	63,287	8·50
1897	332	4,09,60,944	36,10,354	19,38,769	4·73	10	7,91,074	2,08,854	90,278	11·41
1898	330	4,10,54,449	39,07,612	22,74,580	5·54	10	8,09,537	2,04,002	82,133	10·15
1899	330	4,15,68,731	41,10,201	25,01,046	6·02	10	10,79,552	1,77,667	56,827	5·27
1900	330	4,17,49,124	49,12,056	28,41,985	6·81	10	10,77,901	2,08,892	67,093	6·22
1901	330	4,24,30,543	40,77,927	26,48,129	6·24	10	11,20,330	2,17,664	91,877	8·20
1902	330	4,28,89,527	44,66,494	26,82,533	6·25	10	11,38,480	2,16,629	84,864	7·45

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Cooch Behar	34
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Delhi-Umballa-Kalka	67
Deoghur	35
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Dhrangadra	86
Dibru-Sadiya	38
Eastern Bengal State	76
East Coast State	76
East Indian	85
Gaekwar's Dabhoi	75
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Great Indian Peninsula	36
Guntakal-Mysore frontier	45
Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yesvantpur-Mysore frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
Jodhpur	85
Jodhpur-Hyderabad (British section)	43

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income derived by railways which are not guaranteed by the State.

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AND WORKED BY COMPANIES—(*contd*).

CLASS OF RAILWAYS.

Gauge.	3′ 3⅜″					3′ 3⅜″				
Class: No.	8 (*h*)					8 (*j*)				
Railway.	Gaekwar's Mehsana.					Vijapur-Kalol-Kadi.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...
1887	21	13,55,492	27,890	5,564	0·41	...	...	...	...	...
1888	28	9,16,565	47,502	16,672	1·82	...	...	...	...	...
1889	28	11,18,446	53,290	20,348	1·82	...	...	...	...	...
1890	28	25,44,340	59,241	23,308	0·92	...	...	...	...	...
1891	93	29,04,050	1,94,247	1,05,801	3·64	...	...	...	...	...
1892	93	29,71,610	2,58,963	1,53,005	5·15	...	...	...	...	...
1893	93	30,26,752	3,36,859	1,98,250	6·55	...	...	...	...	...
1894	93	30,94,578	2,79,972	2,36,387	7·64	...	...	...	...	...
1895	93	32,55,044	3,38,444	2,02,440	6·22	...	...	...	...	...
1896	93	32,61,448	4,23,283	2,71,262	8·32	...	...	...	...	...
1897	93	32,63,900	3,39,125	1,18,358	3·63	...	...	...	...	...
1898	93	32,82,612	3,46,491	1,99,052	6·07	...	...	...	...	...
1899	93	32,83,612	3,76,160	2,16,654	6·60	...	7,534	...	...	...
1900	93	33,01,950	4,28,545	2,36,754	7·17	...	29,885	...	...	...
1901	93	33,48,911	3,92,227	2,15,111	6·44	...	6,60,716	...	...	...
1902	93	33,63,329	3,74,515	1,98,977	5·92	29	10,47,188	19,514	9,226	1·18

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Kolhapur	82
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Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakhal	84
Madras	56
Madras (North-East line)	40
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannathganj	65
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Nilgiri	66
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Oudh and Rohilkhand State	51
Palanpur-Deesa (State portion)	41
Palanpur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	70
Sagauli-Raxaul	69
Shoranur-Cochin	80
South Behar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
Tanjore District Board (Mayavaram-Mutupet)	59
Tapti Valley	64
Tarakeshwar-Magra	71
Tarkessur	63
Tezpur-Balipara	72
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	LINES OWNED BY NATIVE STATES									
GAUGE.	3' 3⅜"									
Class: No.	9 (c)					10 (d)				
Railway.	HYDERABAD-GODAVARI VALLEY.					SHORANUR-COCHIN.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	...
1895	...	...	...	...	...	...	...	...	...	...
1896	...	3,74,350	...	...	...	...	...	...	...	...
1897	...	17,64,352	...	...	...	...	...	...	...	...
1898	...	86,55,416	...	...	...	...	53,971	...	...	...
1899	154	2,00,21,971	63,381	36,877	0·18	...	80,927	...	...	...
1900	385	2,31,94,817	10,63,023	4,20,826	1·81	...	28,47,394	...	...	...
1901	391	2,44,37,419	20,10,033	9,23,300	3·77	...	50,82,280	...	...	...
1902	391	2,57,75,220	22,88,043	9,67,892	3·76	65	63,66,301	1,34,845	73,299	1·15

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Bhopal-Itarsi (Native State section)	76
Bhopal-Ujjain	76
Bikaner	85
Bina-Goona-Baran	75
Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultapnur	58
Burma	48
Cherra-Companyganj	53
Cooch-Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kalka	62
Deoghur	69
Dhond-Manmad	37
Dhrangadra	87
Dibru-Sadiya	68
Eastern Bengal State	50
East Coast State	50
East Indian	34
Gaekwar's Dabhoi	82
Gaekwar's Mehsana	79
Great Indian Peninsula	36
Guntakal-Mysore frontier	45
Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yeswantpur-Mysore Frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian-Midland	38
Jammu and Kashmir (Native State section)	84
Jamnagar	86
Jetalsar-Rajkot	86
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income derived by railways which are not guaranteed by the State.

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AND WORKED BY COMPANIES—(*contd.*)

CLASS OF RAILWAYS.										
GAUGE.	3' 3⅜"									
Class : No.	21 (*d*)					21 (*e*)				
Railway.	HINDUPUR. (YESVANTPUR-MYSORE FRONTIER).					BIRUR-SHIMOGA.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...
1892	20	24,41,741	...	...	...	...	...	...	...	...
1893	51	24,46,186	57,635	22,708	0·93	...	...	...	...	...
1894	51	24,34,999	1,61,704	56,504	2·32	...	...	...	...	...
1895	51	24,19,698	1,92,159	79,886	3·30	...	...	...	...	...
1896	51	23,94,762	2,23,800	99,592	4·16	...	2,90,226	...	...	...
1897	51	24,79,210	2,69,527	1,18,358	4·77	...	6,27,263	...	...	...
1898	51	24,98,326	1,80,081	56,430	2·26	...	15,70,079	...	...	...
1899	51	24,98,162	1,49,363	50,528	2·02	38	20,85,475	6,186	1,881	0·09
1900	51	24,98,047	1,88,183	67,135	2·69	38	22,94,457	66,227	24,219	1·06
1901	51	24,94,729	1,97,798	60,724	2·43	38	24,01,338	62,058	16,993	0·71
1902	51	24,97,811	2,13,486	77,908	3·12	38	24,05,667	64,606	23,367	0·97

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Nilgiri	66
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North Western State	52
Oudh and Rohilkhand State	51
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Palanpur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
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Rajputana-Malwa	49
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	70
Sagauli-Raxaul	69
Sheranur-Cochin	80
South Behar	62
South Indian	46
Southern-Mahratta	44
Southern Punjab	64
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	LINES OWNED BY NATIVE STATES														
GAUGE.	3' 3⅜"														
CLASS: No.	21 (*f*)					21 (*g*)					9 (*l*)				
Railway.	KOLHAPUR.					MYSORE-NANJANGUD.					GAEKWAR'S DABHOI.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	40	9,62,450	72,083	31,608	3·28
1880	...	...	...	...	...	...	...	...	...	...	57	11,65,540	1,28,825	65,138	5·59
1881	...	...	...	...	...	...	...	...	...	...	60	12,57,448	1,41,233	48,849	3·88
1882	...	...	...	...	...	...	...	...	...	...	59	12,78,942	1,44,022	46,747	3·66
1883	...	...	...	...	...	...	...	...	...	...	59	12,73,630	1,46,970	38,585	3·05
1884	...	...	...	...	...	...	...	...	...	...	59	12,80,177	1,49,091	48,560	3·80
1885	...	...	...	...	...	...	...	...	...	...	59	13,11,229	1,52,283	55,623	4·24
1886	...	...	...	...	...	...	...	...	...	...	59	13,58,502	1,53,699	39,398	2·90
1887	...	...	...	...	...	...	...	...	...	...	59	13,46,259	1,56,332	47,339	3·52
1888	...	...	...	...	...	...	...	...	...	...	59	13,74,295	1,45,757	43,854	3·19
1889	...	13,59,602	...	...	...	...	...	...	...	...	59	16,30,398	1,42,989	49,398	3·07
1890	...	21,37,699	...	...	...	...	...	...	...	...	72	17,53,877	1,95,028	74,526	4·25
1891	29	23,16,183	58,381	20,866	0·90	15	*	*	*	...	72	17,94,157	2,01,165	68,126	3·80
1892	29	23,81,946	90,398	29,182	1·23	15	5,92,414	16,478	6,163	1·03	72	18,47,403	3,38,609	1,06,519	5·77
1893	29	23,21,687	1,88,096	49,991	2·15	15	6,18,551	33,812	14,001	2·26	72	18,55,158	2,52,106	1,32,507	7·14
1894	29	23,05,817	1,23,390	43,632	1·89	15	6,03,095	37,448	12,866	2·13	72	18,88,774	2,40,316	95,429	5·05
1895	29	23,69,206	1,21,147	51,006	2·15	15	6,09,212	39,100	16,432	2·69	72	19,08,757	2,34,473	96,764	5·02
1896	29	23,05,912	1,21,655	54,305	2·35	15	6,09,681	39,322	17,125	2·81	72	20,74,756	2,58,788	1,25,657	6·06
1897	29	23,24,807	94,630	41,981	1·80	15	6,34,764	33,497	14,265	2·25	79	21,08,574	2,20,901	50,949	2·42
1898	29	23,24,807	78,271	24,201	1·04	15	6,43,821	31,493	10,124	1·57	79	21,18,491	2,10,240	— 26,592	...
1899	29	23,24,807	99,195	33,986	1·46	16	6,46,051	16,810	5,671	0·88	79	21,17,586	2,45,974	87,571	4·14
1900	29	23,24,807	1,24,215	44,875	1·93	16	6,53,741	30,860	14,357	1·74	79	21,17,528	2,35,281	61,606	2·44
1901	29	23,24,807	1,14,114	35,750	1·54	16	6,56,462	28,302	7,863	1·20	79	21,14,302	2,53,936	73,427	3·47
1902	29	23,25,587	1,23,913	46,407	2·00	16	6,56,462	29,870	10,938	1·67	79	22,34,829	2,22,573	76,367	3·62

* Information not available.

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income derived by railways which are not guaranteed by the State.

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AND WORKED BY COMPANIES—(*concld.*)										LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY.					CLASS OF RAILWAYS.
2′ 6″					2′ 0″					5′ 6″					GAUGE.
8 (*m*)					7 (*h*)					6 (*c*)					Class : No.
RAJPIPLA.					GWALIOR LIGHT.					RAJPURA-BHATINDA.					Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	16	11,12,259	5,111	—496	...	1884
...	...	...	...	...	...	...	...	...	...	16	12,29,141	48,769	—4,255	...	1885
...	...	...	...	...	...	...	...	...	...	16	12,29,141	64,623	13,816	1·12	1886
...	...	...	...	...	...	...	...	...	...	15	12,43,250	*	15,425	1·24	1887
...	...	...	...	...	...	...	...	...	...	16	22,61,990	*	18,640	0·82	1888
...	...	...	...	...	...	...	...	...	...	108	62,83,918	1,08,480	38,403	0·93	1889
...	...	...	...	...	...	...	...	...	...	108	64,00,534	5,66,946	2,55,126	3·99	1890
...	...	...	...	...	...	...	...	...	...	105	65,81,553	7,19,859	3,23,937	4·92	1891
...	...	...	...	...	...	...	...	...	...	108	66,41,382	5,64,053	2,53,824	3·82	1892
...	...	...	...	...	...	...	...	...	...	108	67,26,941	6,84,337	3,07,956	4·58	1893
...	12,647	...	...	...	...	...	...	...	...	108	67,01,669	12,59,032	5,66,565	8·45	1894
...	77,265	...	...	...	...	...	...	...	...	108	67,02,457	13,18,902	5,93,506	8·86	1895
...	4,09,141	...	...	...	...	2,166	...	...	...	108	66,95,813	9,97,826	4,49,022	6·71	1896
19	7,55,792	5,705	— 6,534	...	...	1,03,552	...	...	...	108	66,95,451	6,96,927	3,13,617	4·68	1897
19	11,03,333	10,624	— 9,172	...	...	9,30,815	...	...	...	108	67,04,520	7,02,637	3,16,187	4·72	1898
37	13,07,820	35,809	8,478	0·65	126	22,79,267	4,094	— 4,113	...	107	67,05,785	6,79,520	3,05,784	4·56	1899
37	13,10,159	49,463	12,139	0·93	126	27,10,557	84,617	— 137	...	107	67,05,785	6,93,804	3,12,211	4·66	1900
37	13,06,822	47,182	10,487	0·80	126	31,07,277	82,227	+520	...	107	67,10,823	8,60,642	3,87,289	5·77	1901
37	13,05,415	38,726	10,131	0·78	126	39,77,104	1,09,577	9,346	0·33	107	67,12,977	8,40,947	3,78,426	5·64	1902

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Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
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Mayavaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY—(*concld*).														
GAUGE.	5′ 6″										2′ 6″				
Class: No.	6 (*d*)					6 (*e*)					2 (*e*)				
Railway.	JAMMU AND KASHMIR. (NATIVE STATE SECTION).					LUDHIANA-DHURI-JAKHAL.					COOCH BEHAR.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	29,545	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	7,51,458	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	16	12,37,071	45,667	13,770	1·11	...	...	...	...	...	...	...	...	...	...
1891	16	13,80,083	57,312	15,904	1·15	...	...	...	...	...	...	14,685	...	...	...
1892	16	9,45,392	54,005	15,444	1·63	...	...	...	...	...	...	4,09,136	...	...	...
1893	16	9,56,327	14,332	14,332	1·50	...	...	...	...	...	22	6,65,172	5,846	−2,455	...
1894	16	9,59,773	17,556	17,556	1·83	...	...	...	...	...	22	7,14,318	40,280	8,576	1·20
1895	16	9,60,080	18,262	18,262	1·90	...	...	...	...	...	22	7,30,953	53,174	19,200	2·63
1896	16	9,60,011	31,321	31,321	3·26	...	...	...	...	...	22	7,66,734	70,128	38,570	5·03
1897	16	9,65,151	35,731	21,587	2·24	...	...	...	...	...	22	9,01,219	64,262	35,344	3·92
1898	16	9,62,846	48,164	21,433	2·23	...	...	...	...	...	22	10,32,938	66,124	6,687	0·65
1899	16	9,60,820	51,532	22,932	2·39	...	...	...	...	...	33	12,99,031	82,773	43,073	3·32
1900	16	9,60,492	55,215	24,571	2·56	...	...	...	...	...	34	12,83,906	94,792	51,602	4·02
1901	16	9,60,636	52,484	23,355	2·43	79	43,10,407	2,02,297	91,034	2·11	34	13,94,933	1,27,596	74,667	5·35
1902	16	9,62,471	51,865	23,080	2·40	79	43,24,799	4,05,005	1,82,252	4·21	34	13,95,766	1,24,741	50,289	3·60

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Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yesvantpur-Mysore frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

LINES OWNED AND WORKED BY NATIVE STATES.															CLASS : OF RAILWAYS.
3' 3⅜"															GAUGE.
18 (*a*)					18 (*b*)					19 (*a*)					Class : No.
JODHPUR-BIKANER (JODHPUR SECTION).					JODHPUR-BIKANER (BIKANER SECTION).					UDAIPUR-CHITOR.					Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
18	4,99,866	40,361	23,119	4·62	...	...	...	...	...	...	...	...	...	...	1883
44	8,09,995	64,262	31,748	3·92	...	...	...	...	...	...	...	...	...	...	1884
64	15,40,335	1,70,691	1,12,505	7·30	...	...	...	...	...	...	...	...	...	...	1885
64	21,22,593	2,05,728	1,33,318	6·23	...	...	...	...	...	...	...	...	...	...	1886
124	22,81,433	3,18,703	1,91,677	8·40	...	...	...	...	...	...	...	...	...	...	1887
124	22,80,006	3,60,803	1,91,558	8·40	...	...	...	...	...	...	...	...	...	...	1888
124	22,73,978	3,59,358	1,92,258	8·45	...	...	...	...	...	...	...	...	...	...	1889
124	22,73,338	3,70,825	1,96,192	8·63	...	4,15,590	...	...	...	...	...	...	...	...	1890
247	41,87,110	6,12,839	3,34,364	7·99	44	14,32,706	5,139	2,724	0·19	...	...	...	...	...	1891
247	60,59,552	9,46,980	5,28,941	8·73	44	9,48,622	76,547	24,904	2·63	...	...	...	...	...	1892
320	64,74,611	8,31,765	4,33,895	6·70	44	9,65,771	66,725	25,735	2·66	...	7,000	...	...	...	1893
320	64,49,374	10,81,156	6,69,373	10·38	44	9,69,407	80,274	40,447	4·17	...	2,70,472	...	...	...	1894
320	64,32,934	9,74,738	5,69,246	8·85	44	9,71,084	86,539	45,096	4·64	60	13,39,850	54,702	18,778	1·40	1895
320	64,78,328	11,64,465	7,38,273	11·40	44	9,73,294	1,20,727	75,382	7·75	60	15,63,721	1,38,219	53,750	3·44	1896
320	74,90,176	11,22,658	7,44,799	9·94	44	9,73,473	1,17,010	65,504	6·73	60	15,99,040	1,23,175	...	...	1897
320	1,00,85,594	12,22,726	7,30,956	7·25	86	23,14,152	1,37,472	77,616	3·35	61	17,89,252	1,43,822	61,364	3·43	1898
380	1,13,42,183	19,09,097	11,66,844	10·29	95	28,61,917	1,74,539	1,04,344	3·65	67	19,89,912	2,10,540	1,04,829	5·27	1899
455	1,14,28,508	16,28,478	9,07,480	7·94	86	32,60,432	1,92,358	1,04,962	3·22	67	19,80,010	3,17,928	1,85,703	9·38	1900
455	1,17,24,896	15,67,073	7,14,836	6·10	157	48,93,535	2,46,875	1,05,692	2·16	67	20,64,858	2,22,175	94,112	4·56	1901
455	1,18,69,424	16,76,216	8,35,202	7·04	245	52,49,339	3,22,022	1,42,580	2·72	67	20,65,630	2,17,388	97,131	4·70	1902

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Mymensingh-Jamalpur-Jagannathganj	65
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Mysore section (Southern Mahratta)	44
Nagda-Ujjain	76
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Palanpur-Deesa (State portion)	41
Palanpur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkund and Kumaon	70
Sagauli-Raxaul	66
Shoranur-Cochin	78
South Behar	52
South Indian	51
Southern Mahratta	41
Southern Punjab	77
Tanjore District Board (Mayavaram-Mutupet)	77
Tapti Valley	77
Tarakeshwar-Magra	89
Tarkessur	70
Tezpur-Balipara	83
Tirhoot State	83
Udaipur-Chitor	40
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Wardha Coal	70
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	LINES OWNED AND WORKED BY NATIVE STATES—(contd).														
GAUGE.	3'3½"														
Class: No.	20 (a)					20 (b)					20 (c)				
Railway.	BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.					JAMNAGAR.					JETALSAR-RAJKOT.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	4,80,171	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	105	49,19,304	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	193	74,46,353	6,38,385	2,31,706	3'11	...	...	...	...	...	...	...	...	...	...
1882	193	86,25,711	8,26,836	3,54,648	4'09	...	...	...	...	...	...	...	...	...	...
1883	193	90,49,232	8,94,179	3,26,513	3'61	...	...	...	...	...	...	...	...	...	...
1884	193	92,92,040	10,92,312	4,98,107	5'36	...	...	...	...	...	...	...	...	...	...
1885	193	96,25,032	10,04,660	3,92,247	4'07	...	...	...	...	...	...	...	...	...	...
1886	193	98,32,553	9,65,379	4,15,149	4'22	...	...	...	...	...	...	...	...	...	...
1887	193	1,08,28,943	9,80,827	4,42,103	4'08	...	...	...	...	...	...	...	...	...	...
1888	209	1,30,68,663	11,20,260	5,06,545	3'88	...	...	...	...	...	...	...	...	...	...
1889	333	1,62,60,477	13,80,417	7,04,177	4'33	...	...	...	...	...	...	...	...	...	...
1890	333	1,68,42,053	15,71,788	6,00,269	3'56	...	...	...	...	...	...	...	...	...	...
1891	333	1,71,24,771	14,77,263	4,75,786	2'78	...	...	...	...	...	...	...	...	...	...
1892	333	1,72,52,030	15,78,178	4,37,876	2'54	...	...	...	...	...	...	7,89,792	...	...	...
1893	334	1,72,18,866	20,63,104	8,88,708	5'16	...	...	...	...	...	46	14,35,593	1,03,006	50,896	3'55
1894	334	1,73,65,592	18,48,287	7,91,335	4'56	...	17,900	...	...	...	46	14,99,605	1,55,556	61,152	4'08
1895	334	1,76,00,032	19,52,221	8,21,220	4'67	...	62,956	...	...	...	46	15,03,585	1,83,338	77,448	5'15
1896	334	1,75,63,395	19,80,878	9,89,274	5'63	...	14,91,727	...	...	...	46	15,29,265	1,92,116	84,238	5'51
1897	334	1,76,53,685	18,21,640	8,19,082	4'64	54	22,50,538	84,476	28,954	1'29	46	15,47,468	2,05,253	84,720	5'47
1898	334	1,78,56,546	16,98,657	7,09,781	3'98	54	23,18,496	1,02,945	31,782	1'37	46	15,78,017	1,78,941	76,057	4'82
1899	334	1,79,56,272	18,53,483	9,26,935	5'16	54	23,08,558	1,26,323	51,540	2'23	46	15,83,208	1,98,927	78,726	4'97
1900	334	1,80,00,616	19,53,865	10,19,773	5'62	54	23,09,481	1,49,153	59,540	2'58	46	15,74,082	2,02,718	86,214	5'48
1901	334	1,80,96,671	15,37,378	6,80,089	3'76	54	23,09,969	1,36,314	51,401	2'22	46	15,74,033	1,76,388	67,251	4'27
1902	334	1,80,87,538	13,71,837	5,66,342	3'13	54	23,58,240	1,31,104	53,751	2'28	46	15,78,583	1,44,317	54,485	3'45

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Amraoti	75	Birur-Shimoga	56	Guntakal-Mysore frontier	36
Assam-Bengal	42	Bombay, Baroda and Central India	58	Gwalior Light	45
Barsi Light	71	Brahmaputra-Sultanpur	48	Hardwar-Dehra	83
Bengal and North-Western (Company's section)	69	Burma	53	Hindupur (Yesvantpur-Mysore frontier)	58
Bengal Central	34	Chenra-Companyganj	84	Howrah-Amta	81
Bengal Doears	67	Cooch-Behar	73	Howrah-Sheakhala	73
Bengal Doears extensions	67	Darjeeling-Himalayan	62	Hyderabad-Godavari Valley	74
Bengal-Nagpur	35	Delhi-Umballa-Kalka	69	Indian Midland	80
Bezwada extension	39	Deoghur	37	Jammu and Kashmir (Native state section)	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhond-Manmad	87	Jamnagar	84
Bhopal-Itarsi (British section)	38	Dhrangadra	68	Jetalsar-Rajkot	86
Bhopal-Itarsi (Native state section)	76	Dibru-Sadiya	50	Jodhpur	86
Bhopal-Ujjain	76	Eastern Bengal State	50	Jodhpur-Hyderabad (British section)	85
Bikaner	85	East Coast State	34		43
Bina-Goona-Baran	75	East Indian	82		
		Gaekwar's Dabhoi			

DIX 7—*continued.*

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

LINES OWNED AND WORKED BY NATIVE STATES—(*concld*).										TOTAL NATIVE STATE LINES.					CLASS: OF RAILWAYS.
3′ 3⅜″					2′ 6″										GAUGE.
20 (*d*)					24 (*a*)										Class: No.
DHRANGADRA.					MORVI.										Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	175	1,41,02,284	8,74,474	1,37,442	0·97	1879
...	...	...	...	...	...	...	...	...	...	297	1,93,63,033	9,09,770	3,22,303	1·66	1880
...	...	...	...	...	...	...	...	...	...	388	2,35,07,183	16,81,892	6,08,206	2·59	1881
...	...	...	...	...	...	...	...	...	...	387	2,65,78,353	20,55,765	8,49,122	3·19	1882
...	...	...	...	...	...	...	...	...	...	405	2,78,65,380	21,19,421	6,83,861	2·45	1883
...	...	...	...	...	...	...	...	...	...	491	3,03,22,129	24,35,407	10,90,205	3·59	1884
...	...	...	...	...	51	*	*	*	...	511	3,99,73,578	27,17,202	10,72,822	2·68	1885
...	...	...	...	...	68	6,88,671	34,822	*	...	645	4,81,66,137	31,07,307	13,48,074	2·80	1886
...	...	...	...	...	68	11,06,500	1,29,407	16,994	1·54	742	5,08,75,527	34,89,282	13,39,665	2·63	1887
...	...	...	...	...	68	11,77,842	1,62,087	21,984	1·87	867	6,23,65,740	39,33,377	16,21,474	2·60	1888
...	...	...	...	...	94	18,90,548	1,77,321	56,726	3·00	1,107	7,37,44,941	49,14,648	18,99,671	2·58	1889
...	...	...	...	...	94	20,25,863	2,95,277	87,550	4·32	1,178	7,99,25,154	60,98,528	23,27,496	2·91	1890
...	...	...	...	...	94	20,55,599	3,09,419	1,08,617	5·28	1,454	8,60,11,514	71,17,189	30,09,498	3·50	1891
...	...	...	...	...	94	21,04,519	3,09,171	1,30,370	6·19	1,474	9,19,77,951	76,94,314	32,91,364	3·58	1892
...	...	...	...	...	94	21,57,365	3,22,817	1,45,732	6·75	1,646	10,02,41,414	85,78,127	39,56,647	3·95	1893
...	...	...	...	...	94	22,23,526	3,20,348	1,42,667	6·42	1,656	10,53,78,060	96,02,002	46,57,448	4·42	1894
...	...	...	...	...	94	23,99,396	3,69,972	2,00,127	8·34	1,902	11,00,11,010	97,80,441	46,77,960	4·25	1895
...	...	...	...	...	94	23,82,315	3,86,883	1,81,621	7·62	1,937	11,58,44,053	1,06,81,174	55,38,473	4·78	1896
...	5,830	...	...	...	94	24,76,757	4,27,484	2,11,642	8·55	2,017	12,38,19,065	1,05,29,467	51,89,196	4·19	1897
21	5,93,589	23,395	10,617	1·79	94	24,79,448	3,76,220	1,63,990	6·61	2,078	13,92,01,222	1,08,95,895	54,25,189	3·90	1898
21	6,06,104	63,876	20,978	3·46	94	25,06,414	4,20,486	1,70,053	6·78	2,571	15,60,67,560	1,26,38,392	67,51,117	4·32	1899
21	5,86,534	57,366	18,984	3·24	94	27,28,115	4,23,308	1,58,794	5·82	2,870	16,09,04,092	1,58,05,695	78,85,412	4·90	1900
21	5,86,109	46,196	11,765	2·01	94	27,59,452	3,58,663	1,25,534	4·55	3,047	17,12,58,202	1,47,93,215	73,89,974	4·32	1901
21	5,85,911	37,731	8,075	1·38	94	27,32,748	3,95,058	1,13,299	4·56	3,216	18,09,83,912	1,57,37,926	77,18,927	4·26	1902

* Information is not available.

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Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	88

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.	LINES IN FOREIGN TERRITORY.									
GAUGE.	3′ 3⅜″									
Class: No.	21 (*h*)					22 (*d*)				
Railway.	WEST OF INDIA PORTUGUESE.					KARAIKKAL-PERALAM.				
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	Information not available.	...	...	...	...	...	...	...	...
1880	...		...	...	...	...	...	...	...	...
1881	...		...	...	...	...	...	...	...	...
1882	...		...	...	...	...	...	...	...	...
1883	...		...	...	...	...	...	...	...	...
1884	...		...	...	...	...	...	...	...	...
1885	...		...	...	...	...	...	...	...	...
1886	...		...	...	...	...	...	...	...	...
1887	41		...	...	...	...	...	...	...	...
1888	51		...	...	...	...	...	...	...	...
1889	51		...	...	...	...	...	...	...	...
1890	51	1,63,14,170	4,75,437	67,001	0·41	...	...	...	...	...
1891	51	1,63,22,139	5,44,014	1,21,583	0·74	...	...	...	...	...
1892	51	1,63,00,901	3,74,681	11,107	0·07	...	...	...	...	...
1893	51	1,62,74,816	5,86,705	1,65,069	1·01	...	...	...	...	...
1894	51	1,63,12,813	5,43,673	1,19,332	0·73	...	...	...	...	...
1895	51	1,63,31,966	5,83,077	1,12,136	0·69	...	4,759	...	...	...
1896	51	1,63,80,444	2,97,176	—78,893	...	...	59,909	...	...	...
1897	51	1,63,40,168	1,79,722	—1,60,785	...	...	5,93,082	...	...	...
1898	51	1,62,97,448	2,20,879	— 1,10,145	...	14	7,21,665	19,733	7,855	1·09
1899	51	1,62,96,432	5,72,475	1,64,665	1·01	14	7,25,344	27,685	9,037	1·25
1900	51	1,63,29,262	3,33,596	— 66,845	...	15	7,29,715	24,608	9,478	1·30
1901	51	1,63,42,023	3,68,120	—48,589	...	15	7,23,786	30,450	13,314	1·84
1902	51	1,63,08,793	3,54,637	51,387	0·37	15	7,23,786	32,736	14,619	2·02

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Bikaner	85
Bina-Goona-Baran	75
Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultanpur	58
Burma	48
Cherra-Companyganj	53
Cooch Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kalka	62
Deoghur	69
Dhond-Manmad	37
Dhrangadra	87
Dibru-Sadiya	68
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East Coast State	50′
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Gwalior Light	45
Hardwar-Dehra	83
Hindupur (Yesvantpur-Mysore frontier)	58
Howrah-Amta	81
Howrah-Sheakhala	73
Hyderabad-Godavari Valley	74
Indian Midland	80
Jammu and Kashmir (Native state section)	38
Jamnagar	84
Jetalsar-Rajkot	86
Jodhpur	86
Jodhpur-Hyderabad (British section)	85

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income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

LINES IN FOREIGN TERRITORY—(*concld*).										CLASS OF RAILWAYS.
3′ 3⅜″					TOTAL LINES IN FOREIGN TERRITORY.					GAUGE.
22 (*e*)										Class: No.
PONDICHERRY.										Railway.
Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per cent. on Capital outlay. (5)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...		...	...	...	1879
...	...	...	...	...	...		...	...	...	1880
...	...	...	...	...	...		...	...	...	1881
...	...	...	...	...	...		...	...	...	1882
...	...	...	...	...	...		...	...	...	1883
...	...	...	...	...	...		...	...	...	1884
...	...	...	...	...	...		...	...	...	1885
...	...	...	...	...	...		...	...	...	1886
...	Information not available.	...	...	...	41	Information not available.	...	...	...	1887
...		...	...	...	51		...	...	...	1888
...		...	...	...	51		...	...	...	1889
...	5,63,543	...	...	...	51	1,68,82,713	4,75,437	67,001	0·40	1890
8	5,68,543	20,106	20,107	3·54	59	1,68,90,682	5,64,120	1,41,690	0·84	1891
8	5,68,543	15,341	15,341	2·70	59	1,68,69,444	3,90,022	25,448	0·16	1892
8	5,68,543	18,014	18,014	3·17	59	1,68,43,359	6,04,719	1,83,083	1·09	1893
8	5,68,543	27,958	18,425	3·24	59	1,68,81,356	5,71,631	1,37,757	0·82	1894
8	5,68,543	50,328	22,711	3·99	59	1,69,05,268	6,33,405	1,34,847	0·79	1895
8	5,68,543	39,681	17,776	3·13	59	1,70,07,996	3,36,857	—61,117	...	1896
8	5,68,543	36,592	17,169	3·02	59	1,75,01,793	2,16,314	—1,43,616	...	1897
8	5,68,543	31,830	14,394	2·53	73	1,75,87,656	2,72,433	—87,896	...	1898
8	5,68,543	45,305	21,627	3·80	73	1,75,90,319	6,45,465	1,95,329	1·11	1899
8	5,68,543	59,583	23,193	4·08	74	1,76,27,520	4,17,787	—34,174	...	1900
8	5,68,543	60,174	32,366	5·69	74	1,76,34,352	4,58,744	—2,909	...	1901
8	5,68,543	70,478	37,960	6·68	74	1,76,01,122	4,57,871	1,03,966	0·59	1902

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Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	88

Appendix 8.
Sterling capital authorised.

Capital authorised to be raised for each Guaranteed railway and State line leased to

(Referred to in paragraph

Classification.	Railways.	Amount authorised to be raised by the companies up to the 31st December 1902.				Amount raised by the companies and Secretary of State in England to the		
		Share Capital.	Debentures.	Debenture stock.	Total.	Share Capital.	*Debentures.* Cash received.	*Debenture stock.* Cash received.
		£	£	£	£	£	£	£
	Guaranteed.							
8 (a)	Bombay, Baroda and Central India	7,550,300	3,005,400	...	10,555,700	* 7,528,628	3,004,400	...
10 (a)	Madras	10,257,630	1,563,700	...	11,821,330	† 10,257,630	1,560,197	...
	Total	17,807,930	4,569,100	...	22,377,030	17,786,258	4,564,597	...
	State lines leased to Companies.							
3 (a)	Bengal Central	500,000	‡ 500,000	...	1,000,000	§ 500,000	...	...
4 (a) & (d)	Bengal-Nagpur	3,000,000	1,700,000	...	4,700,000	‖ 3,000,000	1,699,875	...
	Do. Extension	...	2,805,000	...	2,805,000	...	2,802,625	...
7 (d)	Indian Midland	3,000,000	3,654,100	...	6,654,100	¶ 3,000,000	3,651,994	...
14 (a)	Assam-Bengal	1,500,000	1,355,900	...	2,855,900	‡‡ 1,500,000	1,353,650	...
17 (b)	Lucknow-Bareilly section (Rohilkund and Kumaon)	...	147,000	...	147,000	...	## 147,000	...
21 (a)	Southern Mahratta	3,500,000	1,193,100	...	4,693,100	§ 3,491,540	1,192,350	...
21 (b)	Mysore section (Southern Mahratta)	...	...	1,200,000	1,200,000	...	...	‖ 1,200,000
23 (a)	Burma	2,000,000	...	1,250,000	3,250,000	§§ 2,000,000	...	1,199,819
	Total	13,500,000	11,355,100	2,450,000	27,305,100	13,491,540	10,847,494	2,399,819
	Grand Total	31,307,930	15,924,200	2,450,000	49,687,130	31,277,798	15,412,091	2,399,819

Details of Debenture loans on 31st December 1902 and the dates at which the loans expire.

Bombay, Baroda and Central India Railway—

£			
100,000	2½	per cent.	5th May 1903.
149,400	2½	„ „	15th June 1903.
100,500	3	„ „	8th July 1903.
500,000	2½	„ „	10th July 1903.
100,000	2½	„ „	1st April 1904.
120,000	3½	„ „	1st February 1905.
100,700	3	„ „	8th July 1905.
536,000	3	„ „	1st December 1905.
500,000	3½	„ „	30th June 1907.
198,800	3½	„ „	8th July 1908.
300,000	3½	„ „	7th November 1908.
300,000	3½	„ „	1st January 1909.
3,005,400			

Madras Railway—

£			
200,000	2½	per cent.	31st December 1903.
103,100	2½	„ „	30th June 1904.
300,000	3½	„ „	30th June 1904.
100,000	3	„ „	31st December 1905.
111,500	3	„ „	30th June 1906.
140,000	3½	„ „	30th June 1906.
100,000	3½	„ „	30th April 1907.
200,000	3½	„ „	31st October 1907.
81,400	3½	„ „	31st December 1907.
53,300	3½	„ „	31st December 1907.
174,400	3½	„ „	30th June 1909.
1,563,700			

DIX 8.

Appendix 8.
Sterling capital authorised.

companies, the amount raised and the amount withdrawn to 31st December 1902.

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ADVANCED BY THE SECRE- 31ST DECEMBER 1902.		AMOUNT RAISED IN INDIA TO THE 31ST DECEMBER 1902.			TOTAL AMOUNT WITHDRAWN TO THE 31ST DECEMBER 1902.		REMARKS.
Capital not bearing interest (premium).	Advances made to companies from money raised under Act 51, Vict., Cap. 5.	Share Capital.	Capital not bearing interest (premium).	Total amount raised to the 31st December 1902.	During calendar year 1902.	Up to the close of calendar year 1902.	
£	£	£	£	£	£	£	
28,766	...	*21,672	...	10,583,466	†154,291	10,782,802	
9,761	...	...	...	11,827,588	291,022	12,171,619	
38,527	...	21,672	...	22,411,054	445,313	22,954,421	
...	500,000	...	...	1,000,000	10,567	1,013,168	
8,150	2,760,000	...	...	7,468,025	60,855	¶ 7,791,360	
9,450	...	...	...	2,812,075	1,114,087	6,351,814	
—5,977	‡ 1,345,000	...	...	7,991,017	36,707	8,274,082	
15,385	...	...	...	2,869,035	—4,100	2,869,035	
...	...	...	...	147,000	74,185	** 436,883	
30,923	2,129,900	8,460	34	†† 6,853,207	4,134	†† 6,739,450	
24,000	...	...	...	1,224,000	4,567	1,201,079	
...	...	...	...	3,199,819	472,929	3,096,164	
81,931	6,734,900	8,460	34	33,564,178	1,773,931	37,773,035	
120,458	6,734,900	30,132	34	55,975,232	2,219,244	60,727,456	

* 5 per cent.

† 5 „ „ . . . . £ 8,757,670
4½ „ „ . . . . „ 999,960
4½ „ „ . . . . „ 500,000

‡ Replaced by advances raised under Act 51, Vict., Cap. 5.

§ 3½ per cent.

‖ 4 „ „

¶ Includes expenditure by the State on the Katni-Umaria section, which is equivalent to £323,589.

** £147,000 sterling debentures were issued by the Company in England and sold for Rs. 20,34,195. This sum was paid into the Calcutta Treasury and at the contract rate is equivalent to a sterling payment of £160,837. Expenditure in excess of this capital has been advanced in India.

†† Includes capital raised for completion of the Bellary-Kistna section, and expenditure thereon from the 1st January 1888.

‡‡ 3 per cent.

§§ 2¾ „ „

Bengal-Nagpur Railway—

£		
1,234,400	4 per cent.	18th February 1903.
500,000	2½ „ „	10th July 1903.
400,000	2½ „ „	21st April 1904.
400,000	3 „ „	18th August 1905.
400,000	3 „ „	15th June 1906.
155,000	3½ „ „	3rd January 1908.
400,000	3½ „ „	4th May 1908.
265,600	3½ „ „	18th February 1909
750,000	3¼ „ „	1st June 1909.
4,505,000		

Indian Midland Railway—

£		
582,900	2½ per cent.	30th June 1903.
1,000,000	3⅜ „ „	31st December 1903.
1,000,000	3¾ „ „	30th June 1904.
150,000	3 „ „	30th June 1905.
421,200	3¼ „ „	31st December 1907.
500,000	3½ „ „	3rd October 1908.
3,654,100		

Southern Mahratta Railway—

£		
100,000	2½ per cent.	1st April 1904.
88,100	3 „ „	1st October 1905.
600,000	3 „ „	1st April 1906
50,000	3½ „ „	1st October 1907.
255,000	3½ „ „	1st October 1908.
100,000	3½ „ „	31st May 1909.
1,193,100		

Lucknow-Bareilly Railway—

£ 147,000 . . . 3¾ per cent. . . . . 1st July 1904.

Assam-Bengal Railway—

£		
300,000	2½ per cent.	13th April 1905.
560,000	3½ „ „	4th July 1907.
495,900	3¼ „ „	4th July 1909.
1,355,900		

Appendix 9.
Budget allotments.

Amount allotted to each Railway Administration for expenditure on capital account

(Referred to in para

Class: No. Railway.	1 (a). East Indian.					2 (d), (b), (c) and (e). Eastern Bengal State.					3 (a) Bengal
Particulars. Year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.
1893-94	72,00,000	27,23,000	54,11,000	54,33,772	...	18,30,000	14,68,000	10,94,000	10,55,438	...	6,52,000
1894-95	66,20,000	24,00,000	35,41,000	38,82,382	56·97	21,75,000	9,00,000	6,45,000	6,02,680	...	5,58,000
1895-96	56,70,000	31,00,000	53,50,000	52,11,142	23·32	13,00,000	12,00,000	14,16,000	14,25,285	...	5,96,000
1896-97	1,00,00,000	11,23,000	68,00,000	64,94,213	4·81	49,00,000	40,75,000	45,59,000	42,79,950	...	17,42,000
1897-98	1,30,00,000	1,05,00,000	1,20,00,000	1,28,94,201	1·25	69,14,000	71,25,000	49,33,000	56,02,739	...	14,83,000
1898-99	1,50,00,000	1,62,65,000	1,45,00,000	1,25,59,624	5·61	1,07,69,000	66,57,000	39,83,000	33,05,840	9·49	27,10,500
1899-1900	1,88,00,000	1,50,00,000	1,95,00,000	1,98,82,502	125·48	78,49,000	64,97,000	53,45,000	54,50,381	32·82	16,60,000
1900-01	1,87,50,000	1,28,20,000	1,69,70,000	1,68,96,566	3·23	97,60,000	61,56,000	51,95,000	43,96,060	53·84	2,63,000
1901-02	1,87,50,000	1,87,50,000	1,47,51,000	1,42,15,070	...	96,68,000	73,00,000	82,01,000	82,93,190	6·97	3,03,000
1902-03	1,87,50,000	1,87,50,000	1,42,00,000	...	87·75	1,14,39,000	90,99,000	42,78,000	...	36·75	2,74,000

	6 (a) to (d). Oudh and Rohilkhand State.					6 (a), (f) & (g). North Western State.					7 (a). Great Indian
1893-94	5,22,400	40,85,000	51,94,000	51,20,616	48·56	1,46,00,000	93,63,000	96,28,800	7,39,205	...	18,24,100
1894-95	31,71,000	22,29,000	27,18,000	25,48,142	56·92	29,91,000	91,21,000	1,31,30,000	1,14,89,843	...	15,38,000
1895-96	44,96,000	30,43,000	30,61,000	28,28,376	...	1,67,00,000	1,33,22,000	1,55,38,000	1,53,72,545	103·29	15,46,000
1896-97	32,75,000	33,34,000	34,77,000	31,81,947	49·76	1,33,93,000	1,27,84,000	1,51,27,000	1,55,72,773	263·88	16,03,000
1897-98	51,10,000	51,10,000	52,72,000	53,83,810	45·03	81,88,000	86,10,000	65,62,000	57,78,432	...	12,90,000
1898-99	32,35,000	33,95,000	51,59,000	42,80,096	138·39	76,67,000	89,46,000	77,21,000	73,18,184	...	45,75,000
1899-1900	71,35,000	54,73,000	56,75,000	59,81,021	32·05	51,99,000	54,24,000	46,77,000	43,82,895	224·61	45,45,000
1900-01	40,86,000	30,38,000	29,79,000	29,63,018	86·77	92,49,000	42,88,000	64,06,000	62,50,302	118·13	37,69,000
1901-02	20,44,000	18,31,000	25,91,000	28,94,195	...	85,61,000	68,87,000	89,15,000	83,94,914	...	18,42,000
1902-03	49,78,000	98,78,000	47,42,000	...	...	92,92,000	90,26,000	17,19,000	...	31·00	21,20,000

	9 (f), (g) and (j). Rajputana-Malwa.					10 (a), (b) and (f). Madras.					14 (a). Assam-
1893-94	57,00,000	44,29,000	48,82,000	48,60,479	17·28	9,75,684	10,55,000	4,72,000	3,89,210	...	1,22,40,000
1894-95	30,45,000	23,20,000	38,34,000	30,52,064	...	11,44,000	6,16,000	3,98,050	1,88,902	...	1,08,24,000
1895-96	40,20,000	34,50,000	26,74,000	28,65,344	...	5,98,731	9,63,000	3,41,000	2,89,454	8·55	2,09,53,000
1896-97	16,40,000	14,44,000	3,47,000	— 62,693	25·81	8,31,700	5,66,000	6,02,000	4,65,779	...	2,34,53,000
1897-98	9,52,000	6,55,000	1,50,000	1,27,324	...	11,17,000	12,18,000	2,78,000	3,05,723	...	1,98,55,000
1898-99	17,41,000	13,00,000	6,63,000	— 1,15,096	...	45,88,000	55,05,000	9,07,000	7,79,654	...	1,44,15,000
1899-1900	23,65,000	9,00,000	18,00,000	11,50,566	...	16,00,000	26,04,000	20,26,000	16,66,789	...	1,24,00,000
1900-01	30,80,000	12,00,000	27,44,000	20,89,502	...	60,73,000	31,82,000	39,47,000	43,77,502	...	1,26,92,000
1901-02	28,14,000	21,28,000	14,91,000	15,05,915	...	46,76,000	47,00,000	41,25,000	37,31,500	28·45	83,72,000
1902-03	34,14,000	30,01,000	24,04,000	...	54·25	68,25,000	52,00,000	53,54,000	...	78·75	67,34,000

	18 (c). Jodhpur-Bikaner [Jodhpur-Hyderabad (British section)].					21 (d) to (e). Southern Mahratta.					22 (a), (c) South
1893-94	...	...	...	...	...	25,56,000	18,57,000	5,67,000	5,07,466	56·55	26,29,900
1894-95	...	...	...	...	...	8,40,000	14,69,000	7,31,000	6,81,842	...	17,74,000
1895-96	...	...	...	...	...	11,77,000	12,62,000	8,12,000	7,55,237	...	14,96,000
1896-97	...	...	...	...	...	15,01,000	14,78,000	9,80,000	9,04,205	...	6,15,000
1897-98	...	...	25,000	7,987	...	19,70,000	18,07,000	9,22,000	8,17,542	...	8,35,000
1898-99	23,75,000	1,00,000	10,03,000	9,70,358	...	18,66,000	15,20,000	7,95,000	8,12,707	...	—14,70,000
1899-1900	24,81,000	9,90,000	10,04,000	9,42,349	...	9,65,000	6,00,000	4,75,000	4,60,852	...	5,00,000
1900-01	17,93,000	10,00,000	3,98,000	3,83,059	68·49	12,10,000	6,00,000	6,06,000	7,32,060	...	60,00,000
1901-02	5,000	1,53,000	2,25,000	1,28,892	...	8,25,000	6,00,000	4,26,000	1,36,593	...	1,28,44,000
1902-03	59,500	40,000	69,000	...	83·00	10,70,000	10,20,000	6,99,000	...	...	53,00,000

NOTE.—(1) The credit items represent the amounts by which credits under suspense and on account of capital outlay
(2) Only the figures for the year 1902-03 include information relating to Frontier Reserve material, "Stores"

* Transferred partly to the Bengal-Nagpur
† Includes Rs. 29,72,000 for special items.
‡ Includes Rs. 1,43,000 for special items
§ Includes Rs. 69,40,000 for special items
‖ Includes Rs. 2,26,12,000 for special items.

DIX 9.

Appendix 9.
Budget allotments.

during each official year from 1893-94 and the amount actually expended.

graph 16 of Report).

Central.		4 (a), (b) and (d), Bengal-Nagpur.					East Coast State.					Class : No. Railway.
Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Particulars. / Year.
28,305	...	20,60,000	23,98,000	13,73,000	11,94,152	...	1,00,04,600	91,85,000	99,73,000	97,64,893	174·81	1893-94
58,730	...	8,78,000	6,48,000	3,16,000	3,38,482	...	99,66,000	76,10,000	78,55,000	83,21,931	90·71	1894-95
56,662	...	7,67,000	6,94,000	29,98,000	21,12,021	...	53,00,000	53,00,000	87,30,000	87,63,511	137·37	1895-96
9,56,583	...	2,55,84,000	1,69,64,000	1,55,77,000	1,57,92,396	...	1,03,78,000	99,78,000	1,15,66,000	1,10,42,010	47·15	1896-97
6,57,068	...	3,82,23,000	2,12,84,000	1,94,00,000	1,84,66,149	...	1,06,30,000	1,05,20,000	90,73,000	89,48,642	2·66	1897-98
6,16,262	...	2,37,56,000	2,07,00,000	1,86,10,000	1,84,49,088	323·53	85,18,000	90,44,000	89,58,000	88,66,098	232·32	1898-99
1,07,764	...	2,35,10,000	1,77,00,000	1,77,00,000	1,70,70,994	5·75	29,55,000	27,00,000	30,95,000	29,09,719	...	1899-1900
2,36,634	...	1,47,72,000	1,05,00,000	81,04,000	70,91,187	92·54	34,29,000	14,00,000	11,40,000	...	7·16	1900-01
1,78,232	...	1,83,39,600	1,74,51,000	1,60,39,000	1,44,06,124	2·75	*	*	*	*	*	1901-02
...	...	2,84,45,000	2,09,09,000	1,74,92,000	...	120·00	*	*	*	*	*	1902-03

Peninsula.		7 (d) and (g), Indian Midland.					8 (a), Bombay, Baroda and Central India.					
—4,80,143	...	16,40,800	21,49,000	11,48,000	8,78,552	...	12,50,000	13,05,000	10,55,000	9,40,633	...	1893-94
16,58,250	...	12,99,810	22,07,000	9,25,000	7,48,722	...	15,95,000	9,75,000	17,70,000	16,65,198	...	1894-95
5,69,796	...	3,50,700	2,86,000	8,89,000	4,86,315	5·71	30,40,000	25,50,000	28,13,000	27,55,585	...	1895-96
—4,90,409	1·07	1,00,66,980	96,07,000	68,14,000	70,19,372	...	39,75,000	47,11,000	31,02,000	28,83,994	...	1896-97
15,45,812	...	33,55,000	26,81,000	29,24,000	30,13,399	47·83	50,00,000	67,46,000	27,00,000	25,51,368	...	1897-98
28,57,041	...	33,00,000	20,10,000	20,84,000	19,24,558	68·21	53,50,000	66,43,000	45,91,000	40,21,367	...	1898-99
28,74,659	19·00	19,59,000	17,50,000	23,48,000	19,97,374	...	49,00,000	41,00,000	51,81,000	41,49,383	...	1899-1900
36,93,175	51·06	22,46,000	7,50,000	17,79,000	13,25,242	...	41,50,000	10,00,000	13,98,000	14,72,253	...	1900-01
3,73,378	...	33,50,000	33,50,000	27,40,000	28,06,847	...	30,75,000	28,00,000	37,72,000	38,24,269	...	1901-02
...	...	32,48,000	39,15,000	14,74,000	...	...	16,25,000	16,25,000	33,09,000	...	...	1902-03

Bengal.		16 (b). Bengal and North-Western (Tirhoot section).					17 (b). Rohilkund and Kumaon (Lucknow-Bareilly section).					
86,50,636	...	3,06,500	1,98,000	1,83,000	1,24,598	...	2,20,000	4,41,000	2,78,000	2,10,265	7·37	1893-94
1,66,51,385	...	10,36,000	8,00,000	5,05,000	2,58,104	...	2,75,000	3,80,000	1,66,000	1,11,826	1·75	1894-95
1,37,36,608	158·90	7,71,000	7,00,000	6,03,000	5,08,232	...	2,20,000	2,05,000	3,08,000	2,99,454	...	1895-96
1,15,55,591	201·73	4,05,000	43,25,000	24,41,000	16,59,234	...	4,96,000	3,43,000	2,37,000	2,06,608	...	1896-97
1,18,24,159	...	73,14,000	73,00,000	83,50,000	47,24,254	...	3,25,000	2,28,000	4,48,000	3,57,554	...	1897-98
1,24,72,607	53·82	59,50,000	62,00,000	40,70,000	34,38,341	...	2,20,000	1,50,000	1,53,000	1,28,139	...	1898-99
1,01,54,508	20·31	35,01,000	24,00,000	30,00,000	32,77,918	73·17	1,60,000	69,000	69,000	—2,969	...	1899-1900
90,29,828	142·20	47,86,000	33,38,000	50,88,000	53,92,450	92·18	1,12,000	3,74,000	3,74,000	3,63,582	...	1900-01
70,47,915	10·75	30,46,000	25,46,000	27,46,000	25,89,442	11·36	2,95,000	2,95,000	4,90,000	4,86,258	...	1901-02
...	54·50	31,85,000	21,20,000	33,65,000	...	66·00	13,40,000	11,40,000	9,88,000	...	...	1902-03

and (f). Indian.		23 (a). Burma.					Total.					
7,50,245	...	54,76,400	43,82,000	35,13,800	33,39,972	12·89	7,16,85,384	6,73,10,000	5,44,87,600	4,35,08,414	317·46	1893-94
1,85,032	...	36,31,000	36,28,000	33,93,000	33,48,504	15·46	5,33,60,810	4,87,01,000	5,86,93,030	5,57,60,019	220·96	1894-95
3,82,340	...	15,54,700	11,11,000	16,09,000	16,71,732	141·07	7,05,01,131	5,29,32,000	6,29,00,000	6,02,00,529	574·27	1895-96
1,49,527	...	8,75,000	76,28,000	71,53,000	66,22,514	...	11,38,36,680	9,97,19,000	9,12,89,000	8,82,53,584	590.21	1896-97
—3,01,266	...	77,10,000	77,10,000	55,16,000	52,25,328	50·00	13,32,68,000	10,97,61,000	8,94,80,000	8,79,43,225	146·77	1897-98
—19,58,792	...	99,50,000	1,00,00,000	70,00,000	72,12,253	...	12,45,14,500	11,50,75,000	9,43,75,000	8,81,38,509	831·37	1898-99
10,48,002	4·49	1,18,13,000	80,00,000	78,00,000	78,14,726	57·21	11,42,97,000	8,76,41,000	9,42,33,000	9,12,64,483	494·89	1899-1900
38,97,339	1·45	1,02,85,000	88,00,000	97,85,000	98,58,957	130·66	11,65,05,000	7,30,84,000	8,30,75,000	8,08,35,467	847·71	1900-01
88,12,176	...	1,22,00,000	96,74,000	95,64,000	92,05,122	53·70	11,08,99,000	†10,32,44,000	‡ 9,38,55,500	8,90,29,982	113·78	1901-02
...	128·00	1,00,00,000	54,50,000	58,50,000	...	133·25	11,80,89,500	§ 11,90,00,000	‖10,34,58,000	...	878·25	1902-03

transferred from one railway system to another exceed the amounts allotted and expended on works of construction.
and "Collieries."
railway and partly to the Madras railway from the 1st January 1901.
not included in the statement.
not included in the statement.
not included in the statement.
not included in the statement.

Appendix 10.
Annual capital outlay.

APPEN

Capital expenditure in thousands of rupees

(Referred to in paragraph

Railways (including branches worked.)	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.										EXPENDITURE ON ROLLING STOCK IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.									
	YEARS.										YEARS.									
	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
East Indian	28,32	11,36	11,96	18,06	80,80	1,07,94	68,09	39,09	33,15	28,67	9,57	3,60	26,91	12,02	27,27	36,32	1,06,52	64,34	73,57	54,29
Eastern Bengal	6,80	61	18	4	3,00	13,89	29,15	31,10	40,07	35,32	3,53	55	8,26	7,30	16,63	10,52	18,21	4,57	13,01	18,12
Bengal Central	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11,59	4,37	1,95	27	3	4
Bengal-Nagpur	6,88	80	1,36	62,32	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	17,89	26	2,15	2,26	32	1,13	33,92	27,35	4,09	57,16
Oudh and Rohilkhand State	47,12	30,21	15,14	23,03	39,38	23,72	39,27	27,17	9,30	20,61	60	57	8,06	59	3,51	7,06	5,68	79	5,85	17,93
North Western State	57,85	77,51	1,15,54	2,13,51	1,26,86	62,24	41,82	41,48	54,68	49,91	1,82	87	2,08	10,63	36,32	21,85	5,70	79	12,30	22,21
Great Indian Peninsula	12,76	34,83	65,36	27,30	65,88	80,87	67,71	18,77	2,19	4,12	4,75	9,85	2,68	2,40	7,85	1,63	8,27	13,36	21,27	12,27
Bombay, Baroda and Central India	11	6	6,03	18,76	16,82	49,86	60,95	24,05	13,72	9,76	6,85	5,25	6,94	2,08	24	6,00	13,84	13,34	4,24	2,51
Nizam's Guaranteed State	...	...	...	...	15,32	40,79	78,37	37,06	...	...	16	1	27	2,22	49	3,06	12,80	12,67	1,51	5,86
Madras	...	6,45	...	24,41	10,91	7,47	11,38	20,80	54,50	39,56	2,29	.45	33	1,65	6,57	1,47	3,66	3,26	10,11	25,43
Bengal Dooars	...	...	...	...	72	1,86	7,98	18,19	15,61	15,56	...	...	1	1	52	1	4,09	2,32	1,40	7
Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	1,37	60	1,06	78	14	20	16	2,52	1,13	...
Assam Bengal	39,62	1,06,03	1,39,34	1,11,06	1,09,69	1,35,82	1,05,81	97,65	88,10	71,84	95	4,63	17,52	16,29	4,25	2,65	1,63	87	3,05	7,69
Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bengal and North-Western	...	3	21,09	32,03	1,04,74	62,86	70,90	28,89	30,86	26,15	7,49	14	9,03	2,25	9,98	24,03	15,84	18,58	18,47	12,49
Rohilkund and Kumaon	1,58	1,54	96	4	...	...	...	...	3	43	3	2	33	18	2	2,42	1,02	3,39	2,06	6,86
Rajputana-Malwa	50,12	54,05	14,22	18,44	12,09	8,58	2,67	59	21	1,07	50	4,86	1,12	2,15	*—12*	*—1,59*	3,07	1,83	89	8,70
Jodhpur-Bikaner	...	...	...	23	10,04	26,40	4,86	6,61	4,00	6,77	1,60	*—1,56*	*—11*	39	...	6,08	14,14	22	2,22	1,95
Udaipur-Chitor	...	3,05	10,26	18	26	1,13	2,16	45	21	...	...	...	...	...	2,25	5	...	...	42	...
Bhavnagar-Gondal-Junagad-Porbandar	9,84	17	16	9,24	9,30	5,43	...	...	...	...	17	8	2	1,80	87	1,24	8	16	80	35
Southern Mahratta	...	...	...	...	...	...	...	...	...	...	43	1,30	37	45	1,40	5,34	3,42	1,44	1,88	26
South Indian	*-19,43*	7,49	1,00	53	5,19	*-21,05*	2,70	14,00	36,50	73,39	12,78	1,59	87	29	1,22	43	73	26	*—3*	1,46
Burma	46	...	67,44	43,40	39,67	43,29	62,52	50,63	56,42	35,77	38	10,84	9,93	8,80	1,50	6,36	11,96	4,74	20,85	26,60
Morvi	...	...	...	...	...	...	...	2,32	11	3	41	24	*—10*	24	2	12	4	6	10	*—12*
Barsi Light	...	...	...	...	...	...	...	...	...	...	...	...	...	2,49	1,77	27	...	...	*—39*	...
Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	18	...	...	...
Ranaghat-Krishnagar	...	...	...	...	1,01	5,01	5	...	...	...	...	...	...	...	...	1,20	...	24	...	...
Tezpur-Balipara	...	2,32	62	...	...	...	...	...	...	...	...	98	27	18	...	6	12	...	...	...
Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...	46	*—42*	1	24	2	*—25*	54	*—16*	1	9
Howrah-Amta	...	...	...	3,62	4,01	29	5	1	8	...	...	...	...	1,08	1,26	99	11	46	...	72
Howrah-Sheakhala	...	...	...	1,31	2,81	33	...	...	...	...	...	...	...	...	1,17	48	...	...	...	...
Jorhat	...	...	...	...	...	...	...	...	...	...	16	4	6	*—7*	38	20	...	...	*—31*	4
Kalka-Simla	...	...	...	...	...	...	3,39	4,51	23,53	49,99	...	...	...	...	...	...	...	...	...	1,07
TOTAL	2,42,03	3,36,51	4,70,66	6,07,51	8,30,33	8,27,93	8,26,84	5,42,51	5,03,52	6,11,46	74,19	44,75	98,07	78,70	1,37,44	1,43,71	2,67,68	1,77,67	1,98,73	2,84,05

DIX 10.

during each of the past 10 years.

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Appendix 10.
Annual capital outlay.

EXPENDITURE ON IMPROVEMENT OF EXISTING LINE IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.										TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES *INCLUDING SUSPENSE.*										RAILWAYS (INCLUDING BRANCHES WORKED).
YEARS.										YEARS.										
1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	
20,76	10,98	14,38	15,75	19,82	28,96	40,78	48,92	64,24	58,69	66,09	33,52	62,80	70,12	1,42,83	1,66,97	2,18,13	1,62,19	1,41,12	1,48,82	East Indian.
1,82	3,93	5,91	18,06	27,03	7,64	8,72	13,85	11,37	15,46	10,38	5,73	14,62	27,24	51,23	35,51	56,49	49,25	66,77	84,52	Eastern Bengal.
24	69	34	69	86	2,15	75	1,66	1,18	1,15	23	55	36	4,59	10,29	6,90	3,04	34	2,58	1,58	Bengal Central.
3,31	3,18	3,15	10,08	3,56	57	25	1,68	3,37	1,61	19,35	1,92	6,19	1,16,54	1,99,28	1,62,45	1,98,87	75,84	77,61	1,76,45	Bengal-Nagpur.
79	1,33	7,09	2,61	4,01	4,38	9,74	8,30	9,45	12,75	49,51	36,11	35,29	20,23	44,90	33,16	55,69	39,26	32,76	76,47	Oudh and Rohilkhand State.
40,37	25,88	29,48	30,47	28,30	18,92	20,58	19,10	14,67	48,44	1,00,39	1,07,47	1,72,05	2,63,14	1,66,19	82,47	66,46	83,47	93,87	1,30,10	North Western State.
16,00	13,31	9,99	6,09	4,37	8,04	6,75	10,28	11,65	17,04	22,33	61,82	74,39	51,02	71,81	79,51	78,98	53,32	44,54	23,58	Great Indian Peninsula.
1,98	7,59	16,10	23,86	28,88	15,33	36,60	8,42	21,74	9,89	6,00	16,18	26,16	54,14	58,06	89,09	98,82	28,58	56,65	29,50	Bombay, Baroda and Central India.
3,44	3,97	1,79	82	3,15	1,24	—1,05	2,78	6,53	8,14	6,52	42	4,15	1,85	18,30	60,32	96,90	32,24	18,40	15,84	Nizam's Guaranteed State.
3,53	2,11	3,66	4,07	3,30	3,16	2,43	3,93	9,33	4,56	6,00	7,98	4,39	27,45	19,63	12,65	19,27	55,11	63,58	60,36	Madras.
...	...	49	84	1,08	53	38	16	2	5	...	...	42	1,07	2,17	4,25	22,26	19,77	15,23	10,45	Bengal Dooars.
41	27	21	—25	2,41	7	...	6	7,20	23	1,78	87	1,28	53	2,55	27	17	2,57	8,32	1,73	Dibru-Sadiya.
...	...	...	...	...	...	...	...	...	...	72,94	1,43,79	1,57,49	1,17,01	1,16,28	1,18,14	1,13,15	86,46	85,47	69,86	Assam-Bengal.
—1	...	1	...	...	1	—1	...	...	...	—1	...	1	...	...	1	—1	...	...	—9	Deoghur.
—77	3,29	1,53	49	2,86	5,05	6,63	12,21	7,19	23,66	2,38	3,56	45,34	35,46	1,68,40	79,06	70,13	55,94	48,78	63,47	Bengal and North-Western.
93	63	59	2,56	1,71	79	21	1,15	1,02	66	2,52	2,23	2,50	2,61	3,79	2,10	13	5,37	4,34	12,92	Rohilkund and Kumaon.
3,76	3,18	5,04	5,14	2,85	3,32	3,98	3,53	8,20	13,88	64,37	43,87	34,23	11,46	—2,83	9,43	10,59	17,19	12,74	22,33	Rajputana-Malwa.
4,83	1,58	—4	13	7	6,35	—81	—1,58	3,16	3,77	4,32	—21	—15	48	10,12	39,36	18,04	4,89	19,78	6,64	Jodhpur-Bikaner.
...	...	...	...	...	...	...	...	19	4	...	3,05	10,26	18	2,51	1,18	2,16	45	82	4	Udaipur-Chitor.
25	1,34	2,66	1,03	73	2,10	91	31	16	40	6,23	2,19	2,83	14,18	8,67	8,95	92	17	96	44	Bhavnagar-Gondal-Junagad-Porbandar.
6,92	5,28	7,63	4,01	5,60	6,29	7,50	5,79	4,59	3,29	71	7,87	7,31	6,59	8,19	11,05	8,74	8,15	4,83	1,22	Southern Mahratta.
3,80	2,63	92	1,01	76	1,52	3,59	3,03	3,83	1,46	—11,71	5,25	5,25	—14	4,59	—19,88	7,39	17,47	47,49	99,17	South Indian.
4,92	1,00,89	7,66	17,27	6,24	5,09	11,31	25,14	22,05	7,91	2,33	1,24,03	74,82	82,48	59,87	51,62	86,24	92,79	95,26	71,01	Burma.
5	53	1,37	10	49	7	5	—16	1	...	53	66	1,76	—17	94	3	27	2,22	31	—26	Morvi.
...	...	...	...	...	...	...	...	...	7	...	...	...	2,49	1,77	27	...	...	—39	19	Barsi Light.
...	...	...	...	...	1	1	...	2	5	...	...	...	...	...	2	24	—1	10	20	Tarakeshwar-Magra.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,01	6,21	5	24	...	...	Ranaghat-Krishnagar.
...	...	...	9	3	1	5	13	...	...	...	3,30	89	27	3	7	17	13	...	...	Tezpur-Balipara.
18	40	20	42	38	49	25	10	21	12	64	—3	21	65	41	24	79	—6	22	20	Darjeeling-Himalayan.
...	...	...	...	...	...	...	...	...	...	...	...	...	4,70	5,27	1,28	16	47	8	72	Howrah-Amta.
...	...	...	...	...	...	...	...	...	...	...	...	...	1,31	3,98	81	...	...	...	...	Howrah-Sheakhala.
29	13	3	10	...	...	4	...	17	3	45	18	10	37	37	7	22	—23	—3	—5	Jorhat.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5,81	6,10	22,96	57,95	Kalka-Simla.
1,17,80	1,93,12	1,20,15	1,45,44	1,48,49	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	4,34,28	6,12,31	7,44,95	9,17,85	11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	TOTAL.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		EAST INDIAN RAILWAY.						EASTERN BENGAL.	
NAME OF RAILWAY.		EAST INDIAN.		DELHI-UMBALLA-KALKA.	SOUTH BEHAR.	TARKESSUR.	REWAH.	EASTERN AND SOUTHERN SECTIONS.	
Classification Number.		1 (*a*)		1 (*b*)	1 (*c*)	1 (*d*)	1 (*e*)	2 (*a*)	
Gauge.		5′ 6″		5′ 6″	5′ 6″	5′ 6″	2′ 6″	5′ 6″	
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.
	LENGTH OF LINE.								
(*a*)	Single track . . . Miles.	1,428·65	179·62	162·24	78·76	22·23	31·81	164·81	84·91
(*b*)	Double ,, ... ,,	494·70	...	...	...	...	...	112·21	...
(*c*)	TOTAL MILEAGE .	1,923·35	179·62	162·24	78·76	22·23	31·81	277·02	84·91
	Outlay—								
1	Purchase of line . . Rs.	37,20,00,000	...	...	...	...	...	4,41,55,749	...
2	Overdrawn Capital . ,,	26,45,269	...	...	...	...	...	4,24,482	...
3	Expenditure incurred since purchase . ,,	13,18,12,951	...	...	...	...	...	4,08,20,858	...
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . Rs.	50,64,58,220	...	...	...	...	...	8,54,01,089	25,34,553
	,, XIX and XX . . ,,		19,58,488	1,54,23,791	1,19,88,612	17,91,612	1,61,037		
I	Preliminary expenses . ,,	17,16,975	2,89,115	8,07,400	7,46,511	...	...	...	17,075
II	Land . . . . . ,,	39,11,132	28,136		...	...	...		14,33,704
III	Formation . . . . ,,	2,48,24,007	1,91,825		7,82,699	...	...		2,05,712
IV	Bridgework . . . . ,,	7,75,02,393	1,21,174	39,40,747	37,46,215	...	...		37,093
V	Fencing . . . . . ,,	40,03,216	16,527		79,278	...	...		1,60,030
VI	Electric telegraph . . ,,	29,82,766	...		...	...	...		...
VII	Ballast and permanent-way ,,	11,90,66,923	8,58,743	70,89,175	36,48,721	Details not available.	...	Details not available.	4,74,480
VIII	Stations and buildings . ,,	4,76,97,054	1,899	14,38,798	7,33,508		...		1,30,937
IX	Colliery works . . . ,,	22,74,369	...	...	...		...		...
X	Plant . . . . . ,,	68,24,473	3,64,597	2,38,836	3,86,376		...		4,495
XI	Rolling-stock . . . ,,	11,17,38,710	...	...	...		...		...
XII	General charges . . ,,	5,64,30,578	86,472	9,13,480	7,86,437	...	...		62,695
XIII	Exchange . . . . ,,	...	...	11,759	...	...	...	...	...
XIV	TOTAL OF I TO XIII . ,,	45,89,72,596	19,58,488	144,40,195	1,09,09,745	17,91,612	...	7,03,78,770	†25,34,553
XV	Ferries, etc. . . . ,,	13,20,338	...	...	...	...	...	15,54,377	...
XVI	Suspense . . . . ,,	1,00,25,355	...	—1,43,691	6,884	...	...	45,47,798	...
XVII	Sundries . . . . ,,	18,57,172*	...	11,27,287	10,71,983	...	...	...	...
XVIII	TOTAL items XV to XVII ,,	1,32,02,865	...	9,83,596	10,78,867	...	...	61,02,175	...
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII). ,,	47,21,75,461	19,58,488	1,54,23,791	1,19,88,612	17,91,612	1,61,037	7,64,80,945	25,34,553
XX	Amount paid in premia, &c., on purchase of railway . . . . ,,	3,51,30,587	...	...	...	...	...	89,20,144	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open.	2,39,252	...	95,953	1,52,130	80,593	...	2,86,257	...

NOTE.—The total outlay borne against the capital account of each
* Includes Rs. 9,75,428 on account of surplus stores less sale proceed from
† Including the outlay on the Moorshedabad

DIX II.

1902, distributed over main heads of expenditure.

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STATE RAILWAY.							BENGAL CENTRAL.	BENGAL-NAGPUR RAILWAY.				Items.
NORTHERN & BEHAR SECTIONS.		DACCA SECTION.	COOCH BEHAR-SANTRABARI EXTENSION, BRITISH SECTION.	BRAHMAPUTRA-SULTANPUR.	MYMENSINGH-JAMALPUR-JAGANNATHGANJ.	COOCH BEHAR.		BENGAL-NAGPUR.		RAIPUR-DHAMTARI.	JUBBULPUR-GONDIA EXTENSION.	
2 (*b*)		2 (*b*)	2 (*b*)	2 (*c*)	2 (*d*)	2 (*e*)	3 (*a*)	4 (*a*)		4 (*b*)	4 (*d*)	
3′ 3⅜″ and 2′ 6″		3′ 3⅜″	2′ 6″	3′ 3⅜″	3′ 3⅜″	2′ 6″	5′ 6″	5′ 6″		2′ 6″	2′ 6″	
Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.	
515·45	151·62	85·92	19·79	59·37	53·14	33·60	125·01	1,528·65	176·90	56·24	252·67	(*a*)
...	...	...	...	...	...	...	...	17·35	...	...	...	(*b*)
515·45	151·62	85·92	19·79	59·37	53·14	33·60	125·01	1,546·00	176·90	56·24	252·67	(*c*)
...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	4
4,54,13,572	78,19,513	74,22,061	7,44,551	29,17,993	22,85,677	13,95,766	1,31,11,415	21,43,17,662	94,88,349	13,85,968	53,17,680	
1,97,023	1,01,432	1,27,561	2,999	1,98,272	1,32,108	11,508	1,48,152	19,74,155	1,10,506	10,637	69,723	I
13,68,502	53,281	5,33,311	309	...	...	14,435	76,560	82,51,816	4,51,099	5,499	52,359	II
34,41,039	5,05,533	6,99,703	1,25,909	4,37,361	1,55,327	1,57,975	2,73,977	2,54,96,120	14,28,969	1,00,615	10,91,493	III
77,76,506	46,43,459	5,96,108	1,22,671	3,91,569	1,72,287	3,85,276	14,77,235	4,80,50,135	18,50,655	1,13,618	9,67,655	IV
11,65,847	30,874	1,14,431	2,468	16,076	41,745	1,952	4,18,496	9,88,348	17,174	3,219	7,579	V
25,415	...	...	...	...	...	1,825	...	5,012	...	...	...	VI
1,07,49,460	11,33,103	18,77,371	2,71,239	14,01,540	13,40,074	4,47,619	45,88,699	6,06,69,577	46,58,436	6,54,978	20,17,869	VII
54,45,413	1,67,960	13,66,690	69,102	2,80,991	2,67,176	80,175	12,09,218	1,38,59,172	89,866	67,312	46,260	VIII
...	...	...	...	...	...	...	...	...	...	...	...	IX
13,13,717	3,35,474	2,47,832	8,803	25,496	24,494	16,376	3,97,877	36,73,300	2,20,177	12,903	64,679	X
83,98,473	4,10,835	11,93,099	1,11,320	...	...	1,88,242	28,30,288	3,07,99,814	...	3,24,932	4,04,400	XI
30,42,450	4,33,562	3,63,455	29,731	1,53,615	82,426	81,995	8,44,197	1,25,18,962	5,80,601	92,255	5,93,795	XII
9,31,358	...	3,95,500	...	...	...	...	...	6,53,185	...	...	...	XIII
4,38,55,203	78,19,513	74,22,061	7,44,551	29,04,920	22,15,637	13,87,378	1,27,64,699	20,69,39,596	94,07,468	13,85,968	53,15,812	XIV
15,58,369	...	...	...	...	68,020	3,618	...	21,41,447	...	...	...	XV
...	...	...	...	13,073	966	4,770	3,46,716	52,36,619	80,881	...	1,868	XVI
...	...	...	...	...	1,054	...	...	...	...	...	...	XVII
15,58,369	...	...	...	13,073	70,040	8,388	3,46,716	73,78,066	80,881	...	1,868	XVIII
4,54,13,572	78,19,513	74,22,061	7,44,551	29,17,993	22,85,677	13,95,766	1,31,11,415	21,43,17,662	94,88,349	13,85,968	53,17,680	XIX
...	...	...	...	...	...	...	...	...	...	...	...	XX
85,081	...	86,383	37,623	48,929	41,714	41,291	1,02,109	1,33,907	...	24,644	...	XXI

railway, *i. e.*, for lines open and lines under construction, is shown in Appendix 7.
same, and Rs. 8,43,724 on account of commission on debenture loan.
branch (Rs. 8,332) not included in the details.

Appendix II.
Capital outlay.

APPEN

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		OUDH AND ROHILKHAND STATE RAILWAY.					NORTH WESTERN		
NAME OF RAILWAY.		OUDH AND ROHILKHAND.		HARDWAR DEHRA.	CAWNPORE-BURHWAL (3′ 3⅜″ GAUGE) LINK.	ALLAHABAD FYZABAD.	NORTH		
Classification Number.		5 (*a*)		5 (*b*)	5 (*c*)		6 (*a*)		
Gauge.		5′ 6″		5′ 6″	3′ 3⅜″	5′ 6″	5′ 6″		
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.		
							Military section.	Commercial section.	Total.
	LENGTH OF LINE.								
(*a*)	Singe track . . . . . Miles	1,039·64	14·47	32·04	79·60	94·67	969·88	* 1,943·31	2,913·19
(*b*)	Double „ . . . . . „	...	...	...	...	...	60·36	110·13	170·49
(*c*)	TOTAL MILEAGE.	1,039·64	14·47	32·04	79·60	94·67	1,030·24	2,053·44	3,083·68
	Outlay—								
1	Purchase of line . . . . Rs.	10,33,60,490	...	...	...	...	...	...	14,00,91,244
2	Overdrawn Capital . . . . „	...	...	...	...	...	...	...	28,70,470
3	Expenditure incurred since purchase . . . . . „	3,78,35,957	...	...	...	...	...	...	39,53,73,692
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . . . „	14,11,96,447	4,298	28,36,486	25,11,319	37,06,381	15,98,72,672	37,84,62,734	53,83,35,406
	„ XIX and XX . . . . „								
I	Preliminary expenses . . . . „	12,89,247	...	97,588	31,729	57,348	12,53,533	29,88,348	42,41,881
II	Land . . . . . „	9,82,685	...	...	94,804	2,21,970	10,36,633	24,24,665	34,61,298
III	Formation . . . . . „	44,67,581	108	6,23,625	1,37,459	2,16,287	3,95,44,411	2,79,45,912	6,74,90,323
IV	Bridgework . . . . . „	3,24,22,857	310	5,68,667	2,65,770	5,21,423	3,59,68,994	7,06,12,382	10,65,81,376
V	Fencing . . . . . „	31,02,869	17	51,754	2,56,379	2,019	6,85,734	74,02,110	80,87,844
VI	Electric telegraph . . . . „	46,129	...	...	...	...	86,306	7,98,396	8,84,702
VII	Ballast and permanent-way . . . „	3,86,22,611	1,297	8,90,049	12,16,118	5,96,134	4,50,73,395	9,59,43,226	14,10,16,621
VIII	Stations and buildings . . . „	1,40,66,444	119	2,21,319	4,01,314	54,569	1,08,24,534	3,77,62,802	4,85,87,336
IX	Colliery works . . . . . „	...	...	...	...	...	...	...	...
X	Plant . . . . . „	25,85,709	1,488	24,652	4,760	2,14,781	22,39,311	78,91,873	1,01,31,184
XI	Rolling-stock . . . . . „	1,94,24,635	...	...	...	3,041	1,13,51,262	5,63,73,362	6,77,24,624
XII	General charges . . . . . „	98,50,931	959	2,57,894	1,02,986	2,28,030	74,64,911	2,46,19,290	3,20,84,201
XIII	Exchange . . . . . „	...	...	...	...	...	40,79,560	46,38,856	87,18,416
XIV	TOTAL OF I TO XIII . . . „	12,68,61,698	4,298	27,35,548	25,11,319	21,15,602	15,96,08,584	33,94,01,222	49,90,09,806
XV	Ferries, &c. . . . . „	...	...	...	...	...	2,64,088	4,21,975	6,86,063
XVI	Suspense . . . . . „	36,31,670	...	...	...	15,91,427	...	1,33,92,747	1,33,92,747
XVII	Sundries . . . . . „	—1,98,309	...	1,00,938	...	—648	...	59,95,088	59,95,088
XVIII	TOTAL items XV to XVII . . „	34,33,361	...	1,00,938	...	15,90,779	2,64,088	1,98,09,810	2,00,73,898
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII) . . „	13,02,95,059	4,298	28,36,486	25,11,319	37,06,381	15,98,72,672	35,92,11,032	51,90,83,704
XX	Amount paid in premia, &c., on purchase of railway . . . . . „	1,09,01,388	...	...	...	...	...	1,92,51,702	1,92,51,702
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . . „	1,22,946	...	88,530	31,549	...	1,34,924	1,78,090	1,70,572

NOTE.—The total outlay borne against the capital account of each

* Including Dandot

† Including 29·70 miles,

DIX II—*continued.*

1902, distributed over main heads of expenditure.

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STATE RAILWAY.								GREAT INDIAN PENINSULA (SEE NEXT PAGE FOR REST OF SYSTEM).		
WESTERN.		SOUTHERN PUNJAB.	RAJPURA-BHATINDA.	JAMMU AND KASHMIR (NATIVE STATE SECTION).	LUDHIANA-DHURI-JAKHAL.	KHUSHALGARH-KOHAT-THAL.	NOWSHERA-DURGAI.	GREAT INDIAN PENINSULA.	KHAMGAON.	
		6 (*b*)	6 (*c*)	6 (*d*)	6 (*e*)	6 (*f*)	6 (*g*)	7 (*a*)	7 (*b*)	Items.
		5′ 6″	5′ 6″	5′ 6″	5′ 6″	2′ 6″	2′ 6″	5′ 6″	5′ 6″	
Under construction.										
Jech Doab.	Quetta-Nushki.	Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Open line.	Open line.	
51·40	82·50	424·72	107·05	15·92	78·66	† 91·73	40·25	1,086·28	7·97	(*a*)
...	...	...	...	...	...	...	...	461·92	...	(*b*)
51·40	82·50	424·72	107·05	15·92	78·66	91·73	40·25	1,548·17	7·97	(*c*)
...	...	...	...	...	...	...	...	40,78,15,679	...	1
...	...	...	...	...	...	...	...	25,81,999	...	2
...	...	...	...	...	...	...	...	1,94,25,988	...	3
13,40,785	3,19,971	{ ... 2,27,93,660	... 67,12,977	... 9,62,471	... 43,24,799	... 49,49,378	... 24,92,716	... 42,98,23,666	... 5,22,149	4
12,388	1,13,955	12,94,166	59,422	23,934	36,390	55,225	30,887	10,47,149	369	I
...	...	...	46,494	...	...	2,30,561	18,726	2,08,854	1,115	II
34,412	1,03,897	11,36,984	2,75,955	34,955	2,28,719	10,87,592	74,555	{	44,036	III
31,944	66	8,22,841	5,37,820	1,35,428	2,41,325	10,80,442	5,76,668	} 11,60,60,143	57,634	IV
27,452	...	1,96,494	2,04,472	2,176	1,01,477	21,040	11,739	{	7,366	V
...	...	...	...	170	...	...	...	18,28,528	...	VI
10,25,424	26,828	1,40,98,774	41,57,855	5,66,608	29,11,892	9,70,744	6,67,747	7,55,93,956	3,10,958	VII
1,08,892	16,384	26,19,963	10,79,937	1,33,420	4,43,580	2,88,542	1,40,570	3,91,26,316	53,602	VIII
...	...	...	...	...	...	...	...	...	...	IX
24,781	18,054	70,861	82,433	5,336	51,196	77,645	1,48,694	}	3,434	X
...	...	...	...	...	...	80,830	6,69,592	} 4,58,84,776	11,669	XI
52,410	38,305	15,67,621	2,68,589	60,444	2,35,399	3,91,097	1,04,882	2,10,22,929	31,966	XII
...	...	...	...	...	...	...	...	8,14,432	...	XIII
13,17,703	3,17,489	2,18,97,704	67,12,977	9,62,471	42,49,978	42,83,718	24,43,986	30,15,86,183	5,22,149	XIV
...	...	...	...	...	...	57,328	28,283	...	...	XV
23,082	2,482	6,641	...	...	74,821	6,08,282	20,453	57,95,872	...	XVI
...	...	9,79,315	...	...	...	...	...	...	...	XVII
23,082	2,482	9,85,956	...	...	74,821	6,65,660	48,736	57,95,872	...	XVIII
13,40,785	3,19,971	2,27,93,660	67,12,977	9,62,471	43,24,799	49,49,378	24,92,716	30,73,82,055	5,22,149	XIX
...	...	...	...	...	...	...	...	12,24,41,611	...	XX
...	...	53,651	62,709	60,457	54,030	...	60,720	1,95,448	65,514	XXI

railway, *i.e.*, for lines open and lines under construction, is shown in Appendix 7.
(2′ 0″ gauge), 6·18 miles,
opened on the 25th May 1902.

P. T. O.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		GREAT INDIAN PENINSULA RAILWAY—*concld.*						
NAME OF RAILWAY.		AMRAOTI.	INDIAN MIDLAND.	BINA-GOONA-BARAN.	BHOPAL-UJJAIN.	BHOPAL-ITARSI.	GWALIOR LIGHT.	
Classification Number.		7 (c)	7 (d)	7 (e)	7 (f)	7 (g)	7 (h)	
Gauge.		5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	2′ 6″	
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.
	LENGTH OF LINE.							
(a)	Single track . . . . Miles.	5·49	796·53	145·63	113·27	57·39	126·14	57·86
(b)	Double ,, ... ,,	...	...	...	...	...	...	...
(c)	TOTAL MILEAGE.	5·49	796·53	145·63	113·27	57·39	126·14	57·86
	Outlay—							
1	Purchase of line . . . Rs.	...	...	...	...	...	...	...
2	Overdrawn Capital . . . ,,	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . . ,,	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—							
	Sum of 1 to 3 . . . . Rs.	...	...	...	...	...	...	...
	,, XIX and XX . . . . ,,	4,48 886	10,62,11,714	99,14,442	78,02,855	78,02,330	28,41,444	11,35,660
I	Preliminary expenses . . . ,,	11,799	9,95,314	92,220	94,758	...	13,857	15,747
II	Land . . . . . ,,	2,450	9,78,574	2,267	2,771	16,470	362	...
III	Formation . . . . . ,,	20,377	1,01,55,370	13,91,455	8,07,815	15,99,750	5,29,944	53,545
IV	Bridgework . . . . . ,,	62,106	2,37,11,885	21,47,437	17,33,768	18,69,399	1,44,041	42,353
V	Fencing . . . . . ,,	11,699	26,31,879	2,75,300	82,366	2,18,087	5,687	64
VI	Electric telegraph . . . ,,	...	17,382	2,155	28,993	582	...	...
VII	Ballast and permanent-way . . ,,	2,43,889	3,41,36,727	45,23,880	38,34,607	26,77,512	14,37,121	2,24,985
VIII	Stations and buildings . . . ,,	54,425	93,56,138	5,79,795	5,00,932	9,59,422	1,79,078	7,679
IX	Colliery works . . . . ,,	...	...	...	...	...	...	...
X	Plant . . . . . ,,	3,016	14,48,262	57,576	21,005	43,345	27,810	4,265
XI	Rolling stock . . . . . ,,	8,641	1,77,10,751	18,384	...	55,651	3,47,371	5,642
XII	General charges . . . . ,,	29,709	43,39,747	8,23,973	6,95,840	3,62,142	1,30,693	47,484
XIII	Exchange . . . . . ,,	...	2,52,050	...	...	...	...	...
XIV	TOTAL OF I TO XIII . . . ,,	4,48,111	10,57,34,079	99,14,442	78,02,855	78,02,330	28,15,764	4,01,764
XV	Ferries, &c. . . . . ,,	...	...	...	...	...	...	...
XVI	Suspense . . . . . ,,	775	4,77,635	...	...	...	...	7,33,896
XVII	Sundries . . . . . ,,	...	...	...	...	...	25,680	...
XVIII	TOTAL items XV to XVII . . ,,	775	4,77,635	...	...	...	25,680	7,33,896
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII) . . . . . ,,	4,48,886	10,62,11,714	99,14,442	78,02,855	78,02,330	28,41,444	11,35,660
XX	Amount paid in premia, &c., on purchase of railway . . . ,,	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steamboat service and suspense, per mile open . . . . ,,	81,623	1,32,743	68,080	68,887	1,35,953	22,526	...

NOTE.—The total outlay borne against the capital account of each

DIX II—*continued.*

1902, distributed over main heads of expenditure.

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BOMBAY, BARODA AND CENTRAL INDIA (SEE NEXT PAGE FOR REST OF SYSTEM).									
BOMBAY, BARODA AND CENTRAL INDIA.		TAPTI VALLEY.	NAGDA-UJJAIN.	PETLAD-CAMBAY (ANAND TARAPUR SECTION).	PETLAD-CAMBAY (TARAPUR CAMBAY SECTION).	GODHRA-RUTLAM-NAGDA.	RAJPUTANA-MALWA.	GEAKWAR'S MEHSANA.	Items.
8 (*a*)		8 (*b*)	8 (*c*)	8 (*d*)	8 (*e*)	8 (*f*)	8 (*g*)	8 (*h*)	
5′ 6″		5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′-6″	3′ 3⅜″	3′ 3⅜″	
Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	
208·38	44·00	155·48	34·32	21·50	10·92	141·14	1,645·44	92·63	(*a*)
251·90	...	...	...	...	...	...	2·92	...	(*b*)
460·68	44·00	155·48	34·32	21·50	10·92	141·14	1,648·36	92·63	(*c*)
...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	4
12,22,75,209	4,12,161	1,29,70,581	22,39,663	11,85,930	7,49,676	1,77,99,805	13,86,35,640	33,63,329	
Details not available.	Details not available.	4,17,932	10,938	11,684	4,771	1,80,184	22,71,381	10,667	I
		...	...	...	...	35,570	14,35,320	...	II
		26,35,367	1,84,167	44,086	25,016	60,94,896	75,57,891	3,04,742	III
		25,43,794	4,61,448	87,694	44,795	41,32,900	2,17,42,676	5,90,512	IV
		66,292	14,581	29,033	14,941	2,84,713	31,94,458	62,952	V
		3,264	603	...	...	4,065	2,171	...	VI
		45,68,662	13,07,870	7,58,356	4,79,724	46,96,831	3,86,54,574	16,80,960	VII
		8,52,047	88,720	1,87,251	1,53,162	15,07,680	1,98,88,404	4,71,363	VIII
		...	...	...	...	...	...	...	IX
		58,379	1,729	4,027	8,247	73,501	32,64,681	33,139	X
		...	...	...	...	...	2,26,95,357	44,396	XI
		10,17,337	1,69,607	53,259	18,912	7,89,465	83,88,173	1,65,198	XII
		...	...	...	...	...	49,08,971	...	XIII
11,65,24,313	4,12,161	1,21,63,074	22,39,663	11,75,390	7,49,568	1,77,99,805	13,40,04,057	33,63,329	XIV
...	...	...	...	...	...	...	...	...	XV
53,47,837	...	36,197	...	10,540	108	...	46,31,583	...	XVI
4,03,059	...	7,71,310	...	...	...	...	...	...	XVII
57,50,896	...	8,07,507	...	10,540	108	...	46,31,583	...	XVIII
12,22,75,209	4,12,161	1,29,70,581	22,39,663	11,85,930	7,49,676	1,77,99,805	13,86,35,640	33,63,329	XIX
...	...	...	...	...	...	...	...	...	XX
2,65,423	...	83,190	65,258	54,669	68,642	1,26,115	81,551	36,399	XXI

railway, *i.e.*, for lines open and lines under construction, is shown in Appendix 7.

* Includes State outlay of Rs. 8,08,405 on the Parti branch.

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Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED		BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—*concld.*								
NAME OF RAILWAY.		AHMEDABAD-PRANTIJ.	VIJAPUR-KALOL-KADI.		PALANPUR-DEESA.	GAEKWAR'S DABHOI.		RAJPIPLA.	JAIPUR (SIWAI-MADHOPUR.)	AHMEDABAD-DHOLKA.
Classification Number.		8 (*i*)	8 (*j*)		8 (*k*)	8 (*l*)		8 (*m*)	8 (*n*)	8 (*o*)
Gauge.		3′ 3⅜″	3′ 3⅜″		3′ 3⅜″	2′ 6″		2′ 6″	3′ 3⅜″	3′ 3⅜″
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.	Under construction.	Under construction.
	LENGTH OF LINE.									
(*a*)	Single track . . . Miles.	54·70	29·44	12·20	17·28	78·80	9·20	37·37	72·85	33·54
(*b*)	Double „ . . . . „	...	...	...	...	...	...	...	...	...
(*c*)	TOTAL MILEAGE .	54·70	29·44	12·20	17·28	78·80	9·20	37·37	72·85	33·54
	Outlay—									
1	Purchase of line . Rs.	...	...	...	...	...	...	...	...	...
2	Overdrawn Capital . „	...	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . „	...	...	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—									
	Sum of 1 to 3 . . Rs.	...	...	...	...	...	...	...	...	...
	„ XIX and XX . „	19,70,012	7,76,711	2,68,477	4,21,786	21,09,813	1,25,016	13,05,415	8,88,133	6,01,558
I	Preliminary expenses . „	64,565	4,861	2,003	1,973	19,781	840	14,935	3,213	...
II	Land . . . . . „	17,335	...	...	...	4,07,345	...	...	...	...
III	Formation . . . „	1,30,676	13,599	4,952	64,413		1,554	1,28,528	1,80,545	13,585
IV	Bridgework . . „	2,76,400	1,31,588	27,116	59,429		12,471	3,93,067	3,05,571	1,39,193
V	Fencing . . . . „	20,572	55,898	24	10,037		1,188	14,919	6,413	5,222
VI	Electric telegraph . . „	1,367	...	...	...	63	...	584	...	...
VII	Ballast and permanent-way „	10,04,525	4,36,537	1,72,451	2,09,667	9,50,901	94,547	4,49,027	1,18,288	3,46,759
VIII	Stations and buildings . „	2,08,860	87,867	44,077	54,698	2,68,881	7,719	95,015	2,05,032	50,129
IX	Colliery works . . „	...	...	...	...	...	...	...	...	...
X	Plant . . . . . „	42,430	6,178	298	6,672	8,490	745	7,544	4,798	4,095
XI	Rolling-stock . . . „	...	...	...	...	2,83,109	...	1,34,897	...	...
XII	General charges . . „	1,59,323	42,183	17,556	14,897	1,40,203	5,952	64,956	58,868	38,777
XIII	Exchange . . . . „	...	...	...	...	...	...	...	...	...
XIV	TOTAL OF I TO XIII . „	18,96,253	7,78,711	2,68,477	4,21,786	20,78,773	1,25,016	13,03,472	8,82,728	5,97,760
XV	Ferries, &c. . . . „	...	...	...	...	...	...	...	...	...
XVI	Suspense . . . . „	...	...	...	...	...	...	1,943	5,405	3,798
XVII	Sundries . . . . „	73,759	...	...	...	31,040	...	...	...	...
XVIII	TOTAL items XV to XVII „	73,759	...	...	...	31,040	...	1,943	5,405	3,798
XIX	GRAND TOTAL expenditure in construction of railway (XIV+XVIII) . „	19,70,012	7,78,711	2,68,477	4,21,786	21,09,813	1,25,016	13,05,415	8,88,133	6,01,558
XX	Amount paid in premia, etc., on purchase of railway . . . . „	...	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open „	36,015	26,451	...	24,409	26,380	...	34,880	...	...

NOTE.—The total outlay borne against the capital account of each

DIX II—*continued.*

1902, distributed over main heads of expenditure.

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NIZAM'S GUARANTEED STATE RAILWAY.			MADRAS RAILWAY.							AGRA-DELHI-CHORD.	
NIZAM'S GUARANTEED STATE.	BEZWADA EXTENSION.	HYDERABAD-GODAVARI VALLEY.	MADRAS.		MADRAS (NORTH-EAST LINE).	KOLAR GOLD-FIELDS.	SHORANUR-COCHIN.	NILGIRI.	AZHIKAL-MANGALORE.		
9 (a)	9 (b)	9 (c)	10 (a)		10 (b)	10 (c)	10 (d)	10 (e)	10 (f)	11 (a)	Items.
5′ 6″	5′ 6″	3′ 3⁄8″	5′ 6″		5′ 6″	5′ 6″	3′ 3⁄8″	3′ 3⁄8″	5′ 6″	5′ 6″	
Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Under construction.	Under construction.	
330·13	20·58	391·42	844·67	17·07	466·73	9·88	64·75	16·90	77·27	121·16	(a)
...	...	...	43·43	...	9·46	...	...	...	...	...	(b)
330·13	20·58	391·42	888·10	17·07	497·19	9·88	64·75	16·90	77·27	121·16	(c)
2,30,30,382	...	...	...	...	...	...	...	18,04,448	...	...	I
...	...	...	...	...	...	...	...	...	...	...	II
1,98,59,145	...	...	...	...	...	...	...	31,03,983	...	...	III
4,28,89,527	...	...	...	...	...	...	...	...	...	...	IV
	11,60,425	2,57,75,220	12,73,28,634	76,95,049	6,16,89,605	11,38,480	63,66,301	49,08,431	87,503	1,42,681	
1,85,226	15,319	4,26,091	1,09,665	68,481	3,43,886	8,400	49,767	3,10,602	87,406	45,394	I
...	47,109	...	...	...	14,88,722	32,016	3,87,392	...	...	47,028	II
15,89,515	1,69,533	33,38,643		11,14,156	53,70,026		8,05,712	6,95,524	...	5,089	III
14,05,587	1,62,008	30,81,960	3,99,20,984	12,63,959	1,77,05,387	3,47,753	13,75,279	3,78,210	13	...	IV
1,96,552	17,644	2,23,289		2,85,594	4,86,367		78,502	2,114	...	...	V
...	...	...	11,62,817	369	9,826	2,945	10,077	...	...	...	VI
68,54,394	5,26,455	68,89,409	3,98,98,692	24,27,448	1,86,97,426	5,11,499	14,57,381	4,08,846	...	...	VII
21,49,492	76,443	24,47,138	1,09,88,287	5,66,562	42,83,348	1,55,105	4,16,284	83,119	...	...	VIII
...	...	...	...	...	...	...	...	...	...	...	IX
4,25,091	8,255	3,63,323	13,38,505	3,72,212	12,48,805	8,029	1,53,985	11,639	...	624	X
52,44,663	20,384	36,48,666	1,68,74,924	9,16,281	76,85,917	...	10,19,090	5,15,922	...	...	XI
11,04,421	1,17,275	17,37,075	1,25,28,473	5,33,621	38,62,179	60,388	3,55,345	3,09,052	84	24,850	XII
...	...	...	...	...	...	...	...	...	...	...	XIII
1,91,54,941	11,60,425	2,21,55,594	12,28,22,347	75,48,683	6,11,81,880	11,26,135	61,08,814	27,15,028	87,503	1,22,985	XIV
...	...	...	...	59,165	2,93,936	...	76,636	...	...	...	XV
7,04,204	...	2,52,548	45,06,287	87,201	2,13,789	12,345	1,80,851	37,291	...	19,696	XVI
...	...	33,67,078	...	...	...	...	...	3,51,664	...	...	XVII
7,04,204	...	36,19,626	45,06,287	1,46,366	5,07,725	12,345	2,57,487	3,88,955	...	19,696	XVIII
1,98,59,145	11,60,425	2,57,75,220	12,73,28,634	76,95,049	6,16,89,605	11,38,480	63,66,301	31,03,983	87,503	1,42,681	XIX
2,30,30,382	...	...	...	...	...	...	...	18,04,448	...	...	XX
1,27,784	56,386	65,205	1,45,452	...	1,23,647	1,13,981	95,528	2,88,233	...	...	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		Bengal Dooars.		Dibru-Sadiya Railway.		Assam-Bengal.		Noakhali (Bengal).	Deoghur.
Name of Railway.				Dibru-Sadiya.	Ledo and Tikak-Margherita Colliery.				
Classification Number.		12 (*a*) and (*b*)		13 (*a*)	13 (*b*)	14 (*a*)		14 (*b*)	15 (*a*)
Gauge.		3′ 3⅜″		3′ 3⅜″	3′ 3⅜″	3′ 3⅜″		3′ 3⅜″	3′ 3⅜″
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Under construction.	Open line.
	Length of Line.								
(*a*)	Single track . . . Miles.	36·40	*116·56	77·50	11·00	589·21	151·81	...	4·79
(*b*)	Double ,, . . . ,,	...	...	...	...	...	3·43	...	...
(*c*)	Total Mileage.	36·40	116·56	77·50	11·00	589·21	155·24	...	4·79
	Outlay—								
1	Purchase of line . . Rs.	...	...	...	...	...	...	...	...
2	Overdrawn Capital . ,,	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . ,,	...	...	...	...	...	...	...	...
4	Total outlay on railway to end of 1902—								
	Sum of 1 to 3 . . Rs.	...	...	...	...	...	...	...	...
	,, XIX and XX . ,,	26,50,627	72,66,166	82,00,694	16,53,446	7,29,57,655	3,81,77,267	...	2,75,738
I	Preliminary expenses . ,,	1,66,849	3,86,341	1,73,469	Details not available.	14,61,395	9,88,195	Unknown at present.	Details not available.
II	Land . . . . ,,	...	...	39,264		35,02,111	1,71,919		
III	Formation . . . ,,	3,52,761	6,92,730	12,07,260		1,79,73,899	2,35,10,018		
IV	Bridgework . . . ,,	3,70,352	14,62,970			1,02,28,441	53,03,261		
V	Fencing . . . . ,,	2,783	17,633			12,66,444	21,988		
VI	Electric telegraph . . ,,	...	...			...	...		
VII	Ballast and permanent-way ,,	7,22,543	17,08,800	18,66,476		1,38,07,667	31,55,242		
VIII	Stations and buildings . ,,	2,60,287	4,00,491	2,14,732		63,24,189	2,51,228		
IX	Colliery works . . . ,,	...	...	...		...	...		
X	Plant . . . . ,,	11,368	1,86,937	5,36,395		13,60,443	3,58,438		
XI	Rolling-stock . . . ,,	3,85,211	7,87,600	19,18,650		47,12,305	12,41,558		
XII	General charges . . ,,	2,14,979	6,53,033	17,74,874		1,01,43,794	26,72,600		
XIII	Exchange . . . . ,,	...	...	...		...	...		
XIV	Total of I to XIII . ,,	24,26,133	62,96,535	77,61,120	16,53,446	7,07,80,688	3,76,74,447	...	2,75,000
XV	Ferries, etc. . . . ,,	1,67,462	...	22,518	...	3,39,494	...	...	...
XVI	Suspense . . . . ,,	...	4,17,416	1,50,186	...	18,37,473	5,02,820	...	738
XVII	Sundries . . . . ,,	57,032	5,52,215	2,66,875	...	...	...	...	...
XVIII	Total items XV to XVII . ,,	2,24,494	9,69,631	4,39,574	...	21,76,967	5,02,820	...	738
XIX	Grand Total expenditure in construction of railway (XIV+XVII) . . . ,,	26,50,627	72,66,166	82,00,694	16,53,446	7,29,57,655	3,81,77,267	...	2,75,738
XX	Amount paid in premia, &c., on purchase of railway . . ,,	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . ,,	68,219	...	1,03,587	1,50,313	1,20,704	...	...	57,565

NOTE.—The total outlay borne against the capital account of each

* Includes 77·76 miles opened for traffic.

DIX II—*continued.*

1902, distributed over main heads of expenditure.

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BENGAL AND NORTH-WESTERN.				ROHILKUND AND KUMAON RAILWAY.					
BENGAL AND NORTH-WESTERN.		TIRHOOT.	SAGAULI-RAXAUL.	ROHILKUND AND KUMAON.		LUCKNOW-BAREILLY.		POWAYAN LIGHT.	
16 (*a*)		16 (*b*)	16 (*c*)	17 (*a*)		17 (*b*)		17 (*c*)	Items.
3′ 3⅜″		3′ 3⅜″	3′ 3⅜″	3′ 3⅜″		3′ 3⅜″		2′ 6″	
Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.	Open line.	
747·75	102·11	516·89	18·09	53·92	...	231·17	5·93	39·50	(*a*)
...	...	...	...	...	...	...	...	...	(*b*)
747·75	102·11	516·89	18·09	53·92	...	231·17	5·93	39·50	(*c*)
...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	4
5,32,31,393	52,51,132	4,91,41,200	10,73,421	23,29,572	7,339	1,12,49,859	46,160	8,93,456	
5,25,522	3,08,121	2,17,428	89,158	90,660	7,339	1,62,700	...	...	I
...	...	26,54,127	...	2,277	...	2,54,729	...	161	II
35,78,840	1,67,745	37,46,391	88,576	1,28,276	...	5,68,444	102	10,961	III
99,69,558	22,71,888	92,63,225	2,70,178	1,53,387	...	7,85,667	...	17,434	IV
8,88,469	5,677	12,00,017	7,552	46,197	...	2,01,348	...	166	V
27,491	542	21,620	...	...	...	...	...	...	VI
1,46,80,407	10,69,412	1,20,11,163	3,54,180	8,98,385	...	37,48,147	45,550	71,150	VII
53,71,901	1,23,486	45,21,693	78,450	1,74,487	...	10,29,570	...	10,801	VIII
...	...	...	...	...	...	...	...	...	IX
15,22,885	4,51,485	11,37,142	23,275	48,415	...	2,42,718	16	3,421	X
87,29,423	...	86,96,056	...	5,14,050	...	28,01,570	...	1,40,886	XI
32,26,886	3,21,429	28,19,404	1,01,845	1,82,911	...	4,84,249	492	10,586	XII
...	...	7,04,770	...	...	...	42,150	...	...	XIII
4,85,21,382	47,19,785	4,69,92,436	9,83,214	22,39,045	7,339	1,03,21,292	46,160	2,73,666	XIV
21,33,906	...	8,35,723	...	...	...	68,934	...	...	XV
8,26,697	2,03,602	13,13,041	62,634	90,527	...	8,18,604	...	797	XVI
17,49,408	3,27,745	...	27,573	...	...	41,029	...	6,18,993	XVII
47,10,011	5,31,347	21,48,764	90,207	90,527	...	9,28,567	...	6,19,790	XVIII
5,32,31,393	52,51,132	4,91,41,200	10,73,421	23,29,572	7,339	1,12,49,859	46,160	8,93,456	XIX
...	...	...	...	...	...	...	...	...	XX
64,890	...	90,913	55,281	41,525	...	45,124	...	22,599	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		JODHPUR-BIKANER RAILWAY.			UDAIPUR-CHITOR.	BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY.			
NAME OF RAILWAY.		JODHPUR SECTION.	BIKANER SECTION.	JODHPUR-HYDERABAD (BRITISH SECTION).		BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.	JAMNAGAR.	JETALSAR-RAJKOT.	DHRANGADRA.
Classification Number.		18 (*a*)	18 (*b*)	18 (*c*)	19 (*a*)	20 (*a*)	20 (*b*)	20 (*c*)	20 (*d*)
Gauge.		3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.
	LENGTH OF LINE.								
(*a*)	Single track . . . . Miles	454·94	245·35	123·98	67·30	334·19	54·22	46·21	20·83
(*b*)	Double „ . . . . „	...	...	...	...	...	...	...	...
(*c*)	TOTAL MILEAGE . .	454·94	245·35	123·98	67·30	334·19	54·22	46·21	20·83
	Outlay—								
1	Purchase of line . . . Rs.	...	...	...	...	...	...	...	...
2	Overdrawn Capital . . „	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . . „	...	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . . „	...	...	...	...	...	...	...	...
	„ XIX and XX . . „	1,18,69,424	52,49,339	40,45,972	20,65,630	1,80,87,538	23,58,240	15,78,583	5,85,911
I	Preliminary expenses . . „	82,042	24,988	59,058	7,729	1,19,442	18,973	14,238	5,813
II	Land . . . . . „	1,621	2,385	37,364	...	63,889	...	15,369	685
III	Formation . . . . „	6,46,355	3,98,274	4,47,151	2,89,001	17,31,528	2,40,675	2,44,962	62,745
IV	Bridgework . . . . „	2,97,391	35,513	4,61,646	2,24,192	43,66,125	5,23,814	2,29,786	49,190
V	Fencing . . . . . „	4,325	3,506	40,043	18,046	1,02,003	18,096	67,090	5,225
VI	Electric telegraph . . . „	89,698	20,606	...	...	11,775	...	...	...
VII	Ballast and permanent-way . „	68,25,710	32,86,294	22,00,516	9,30,070	50,50,886	8,00,908	6,82,158	3,36,455
VIII	Stations and buildings . . „	6,27,735	2,04,787	3,70,225	1,81,542	26,64,127	2,02,359	2,26,091	89,495
IX	Colliery works . . . . „	...	...	...	...	...	...	...	...
X	Plant . . . . . „	1,72,822	27,531	31,581	31,214	3,29,795	17,471	15,945	8,144
XI	Rolling-stock . . . . „	27,64,861	7,05,498	7,377	2,72,419	24,11,113	4,29,773	...	3,772
XII	General charges . . . „	1,67,506	72,764	3,05,694	1,11,417	8,93,480	95,232	82,974	24,387
XIII	Exchange . . . . „	...	...	...	...	...	...	...	...
XIV	TOTAL OF I TO XIII . . „	1,17,29,966	47,82,083	39,60,655	20,65,630	1,77,44,263	23,47,301	15,78,583	5,85,911
XV	Ferries, &c. . . . . „	...	...	26,907	...	...	...	...	...
XVI	Suspense . . . . . „	1,39,458	4,67,256	58,410	...	3,43,375	10,939	...	...
XVII	Sundries . . . . . „	...	...	...	...	...	...	...	...
XVIII	TOTAL items XV to XVII . „	1,39,458	4,67,256	85,317	...	3,43,375	10,939	...	...
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII) . . . „	1,18,69,424	52,49,339	40,45,972	20,65,630	1,80,87,538	23,58,240	15,78,583	5,85,911
XX	Amount paid in premia, &c., on purchase of railway . . „	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . . . . „	26,090	21,395	32,634	30,693	53,096	43,292	34,161	28,128

NOTE.—The total outlay borne against the capital account of each

DIX II—*continued.*

Appendix II.
Capital outlay.

1902, distributed over main heads of expenditure.

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SOUTHERN MAHRATTA RAILWAY.								
SOUTHERN MAHRATTA.	MYSORE SECTION.	GUNTAKAL-MYSORE FRONTIER.	HINDUPUR (YESVANTPUR-MYSORE FRONTIER),	BIRUR-SHIMOGA.	KOLHAPUR.	MYSORE-NANJANGUD.	WEST OF INDIA PORTUGUESE.	Items.
21 (*a*)	21 (*b*)	21 (*c*)	21 (*d*)	21 (*e*)	21 (*f*)	21 (*g*)	21 (*h*)	
3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	
Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	
1,042·04	296·22	119·50	51·35	37·92	29·27	15·80	51·11	(*a*)
...	...	...	...	...	...	...	...	(*b*)
1,042·04	296·22	119·50	51·35	37·92	29·27	15·80	51·11	(*c*)
...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	4
9,85,13,731	1,60,76,009	59,04,714	24,97,811	24,05,667	23,25,587	6,56,462	1,63,08,793	
10,50,895	2,95,374	59,327	64,092	17,627	13,858	15,210	90,501	I
11,69,216	1,56,462	28,457	25,337	20,837	30,908	10,884	...	II
1,91,87,375	24,70,316	7,83,933	5,50,112	5,60,346	2,68,590	1,41,447	61,41,566	III
1,87,17,516	21,51,030	20,32,587	5,47,041	4,54,355	11,22,548	98,923	24,48,329	IV
13,56,444	1,42,641	58,681	65,247	55,114	41,668	28,173	14,024	V
...	...	1,345	...	...	...	...	74,945	VI
2,17,89,655	51,00,249	18,23,247	9,09,862	7,99,725	4,91,136	2,52,931	14,76,949	VII
1,22,33,962	16,37,665	4,73,465	1,45,912	2,40,751	2,29,259	62,512	9,34,229	VIII
...	...	...	...	...	...	...	...	IX
30,63,294	3,64,571	29,980	35,846	44,226	7,969	6,102	2,89,897	X
1,15,53,041	25,02,600	...	...	...	...	...	7,47,167	XI
65,09,954	9,28,177	6,13,692	1,43,886	1,62,642	1,20,569	40,280	13,60,408	XII
4,91,090	...	...	...	...	...	...	...	XIII
9,73,62,642	1,57,49,085	59,04,714	24,87,335	23,55,623	23,25,587	6,56,462	1,35,77,125	XIV
...	...	...	...	...	...	...	25,32,299	XV
11,51,089	3,26,924	...	10,476	50,044	...	...	1,99,369	XVI
...	...	...	...	...	...	...	...	XVII
11,51,089	3,26,924	...	10,476	50,044	...	...	27,31,668	XVIII
9,85,13,731	1,60,76,009	59,04,714	24,97,811	24,05,667	23,25,587	6,56,462	1,63,08,793	XIX
...	...	...	...	...	...	...	...	XX
93,435	53,167	49,412	48,439	62,121	79,453	41,548	2,65,645	XXI

railway, *i.e.*, for lines open and lines under construction, is shown in Appendix 7.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		SOUTH INDIAN RAILWAY.								BURMA.	
NAME OF RAILWAY.		SOUTH INDIAN.	TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET).		TINNEVELLY-QUILON (TRAVANCORE) (BRITISH SECTION).		KARAIKKAL-PERALAM.	PONDICHERRY.	TINNEVELLY-QUILON (TRAVANCORE) (NATIVE STATE SECTION).		
Classification Number.		22 (*a*)	22 (*b*)		22 (*c*)		22 (*d*)	22 (*e*)	22 (*f*)	23 (*a*)	
Gauge.		3′ 3⅜″	3′ 3⅜″		3′ 3⅜″		3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Under construction.	Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.	Under construction.
	LENGTH OF LINE.										
(*a*)	Single track . . Miles	1,123·13	71·11	33·88	19·05	31·33	14·65	7·85	57·95	1,248·35	76·94
(*b*)	Double ,, . . ,,	...	...	...	...	...	...	...	...	12·15	...
(*c*)	TOTAL MILEAGE . .	1,123·13	71·11	33·88	19·05	31·33	14·65	7·85	57·95	1,260·50	76·94
	Outlay—										
1	Purchase of line . Rs.	5,69,25,570	...	...	...	...	...	...	...	7,69,12,324	...
2	Overdrawn Capital . ,,	...	...	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . ,,	3,16,35,689	...	...	...	...	...	...	...	3,61,69,157	1,39,42,109
4	TOTAL outlay on railway to end of 1902—										
	Sum of 1 to 3 . ,,	8,85,61,259	...	...	...	...	...	...	...	...	...
	,, XIX and XX ,,		31,58,026	6,60,176	10,28,541	21,36,114	7,23,786	5,68,543	75,81,838	11,30,81,481	1,39,42,109
I	Preliminary expenses ,,	11,23,855	22,170	12,120	19,105	31,368	4,250		1,18,222	24,47,647	4,02,887
II	Land . . . ,,	10,73,227	2,05,882	75,540	1,39,511	2,50,336	...		1,57,848	16,87,942	4,33,387
III	Formation . . . ,,	55,46,171	2,73,082	47,569	91,342	1,88,852	55,291		32,91,011	1,69,60,809	34,90,550
IV	Bridgework . . ,,	1,48,93,923	9,22,690	40,311	2,28,995	2,18,110	72,497		12,53,841	1,71,86,991	23,33,720
V	Fencing . . . ,,	17,10,118	44,590	1,960	18,192	27,565	29,223		65,915	28,91,192	45,240
VI	Electric telegraph . ,,	1,05,571	3,033	...	...	...	186		...	9,238	...
VII	Ballast and permanent-way . . ,,	2,11,51,331	10,19,725	29,828	3,46,998	4,45,761	3,30,686		3,67,867	2,72,42,414	38,01,982
VIII	Stations and buildings ,,	85,93,743	2,87,667	8,838	57,591	98,713	1,08,537		1,81,278	1,01,67,704	5,52,339
IX	Colliery works . . ,,	...	...	...	...	...	...		...	...	...
X	Plant . . . ,,	17,78,995	19,873	4,850	6,898	11,530	8,863		1,78,013	18,16,974	2,14,827
XI	Rolling-stock . . ,,	1,30,83,810	...	...	...	...	...		...	1,68,33,294	11,28,876
XII	General charges . ,,	85,60,171	3,59,314	28,000	1,19,909	2,02,042	1,14,837		7,35,964	93,91,989	14,06,309
XIII	Exchange . . . ,,	2,42,360	...	...	...	...	...		...	12,50,610	...
XIV	TOTAL OF I TO XIII ,,	7,78,63,275	31,58,026	2,49,016	10,28,541	14,74,277	7,24,370	5,68,543	63,49,939	10,78,86,806	1,38,10,117
XV	Ferries, &c. . . ,,	...	...	...	...	...	...	...	14,592	7,06,446	1,31,990
XVI	Suspense . . . ,,	28,51,016	...	4,11,160	...	6,61,837	...	...	12,17,307	44,88,229	2
XVII	Sundries . . . ,,	11,18,280	...	...	...	...	—584	...	...	...	...
XVIII	TOTAL items XV to XVII . . ,,	39,69,296	...	4,11,160	...	6,61,837	—584	...	12,31,899	51,94,675	1,31,992
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII) . ,,	8,18,32,571	31,58,026	6,60,176	10,28,541	21,36,114	7,23,786	5,68,543	75,81,838	11,30,81,481	1,39,42,109
XX	Amount paid in premia, &c., on purchase of railway . . ,,	67,28,688	...	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . . ,,	70,323	44,410	...	53,992	...	49,405	72,426	...	85,590	...

Details not available.

NOTE.—The total outlay borne against the capital account of each

DIX II—*concluded.*

1902, distributed over main heads of expenditure.

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Morvi.		Barsi Light.	Tarakeswar-Magra.		Ranaghat-Krishnagar.	Tezpur-Balipara.	Darjeeling-Himalayan.	Howrah-Amta.	Howrah-Sheakhala.	Jorhat.	Kalka-Simla.	
24 (*a*)		25 (*a*)	26 (*a*)		27 (*a*)	28 (*a*)	29 (*a*)	30 (*a*)	31 (*a*)	32 (*a*)	34 (*a*)	Items.
2′ 6″		2′ 6″	2′ 6″		2′ 6″	2′ 6″	2′ 0″	2′ 0″	2′ 0″	2′ 6″	2′ 6″	
Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.	
94·36	...	21·59	31·12	...	20·25	20·10	31·00	28·69	19·75	30·00	60·00	(*a*)
...	...	...	...	...	...	...	...	...	...	...	...	(*b*)
94·36	...	21·59	31·12	...	20·25	20·10	31·00	28·69	19·75	30·00	60·00	(*c*)
...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	4
24,86,077	2,46,671	13,18,242	9,76,055	139	7,51,158	4,87,240	34,96,507	12,68,532	6,09,565	8,95,693	92,81,656	
18,134	8,256	1,51,296	298	139	...	1,970	72,000	...	...	388	3,41,853	I
1,672	1	22,151	90,909	...	123	10,656	33,623	59,454	10,586	6,131	2,966	II
6,99,502	1,82,796	13,859	69,904	...						81,470	54,62,392	III
...	18,263	71,205	1,45,823	...	5,20,637	51,576	8,95,703			65,245	4,44,848	IV
...	120	13,065	5,856	...				5,95,278	3,59,270	2,999	14,140	V
...	...	...	56	...						...	...	VI
11,24,300	5,910	3,05,170	4,02,859	...	...	1,65,884	7,12,586			3,36,408	4,83,760	VII
62,513	...	1,42,333	38,708	...	77,029	25,513	5,52,664	1,40,560	67,385	89,453	1,51,022	VIII
...	...	...	...	...	...	...	...	...	...	...	...	IX
14,598	4,061	13,857	18,426	...	8,484	30,709	75,270	11,702	7,493	59,994	1,00,576	X
4,07,866	...	4,15,170	1,87,874	...	1,44,885	1,60,417	5,60,557	4,61,518	1,64,825	1,88,592	1,07,459	XI
1,02,847	27,264	99,175	...	...	...	40,515	4,29,203	...	...	41,247	7,43,547	XII
...	...	...	...	...	...	...	...	...	...	...	...	XIII
24,31,432	2,46,671	12,47,281	9,60,713	139	7,51,158	4,87,240	33,31,606	12,68,532	6,09,565	8,71,927	78,52,563	XIV
...	...	...	...	...	...	...	...	...	...	...	...	XV
54,645	...	11,847	13,342	...	...	...	1,64,901	...	...	27,704	10,31,580	XVI
...	...	59,114	...	...	...	...	...	...	...	3,938	3,97,513	XVII
54,645	...	70,961	15,342	...	...	...	1,64,901	...	...	23,766	14,29,093	XVIII
24,86,077	2,46,671	13,18,242	9,76,055	139	7,51,158	4,87,240	34,96,507	12,68,532	6,09,565	8,95,693	92,81,656	XIX
...	...	...	...	...	...	...	...	...	...	...	...	XX
25,768	...	60,509	30,871	...	37,094	24,241	65,325	44,215	30,864	29,064	...	XXI

railway, *i.e.*, for lines open and lines under construction, is shown in Appendix 7.

APPENDICES
of
STATISTICS.

NOTE.—*The statistics for the years 1898 to 1901, printed in the Administration report for 1901, have been revised in consequence of the inclusion, as far as possible, of the statistics of "Light railways" on the 2' 6" and 2' 0" gauges and the exclusion of the Calcutta Port Commissioners' railway.*

Appendix 12.
General results.

APPEN

General results
Indian Railways
(Referred to in paragraphs

GENERAL RESULTS

Calendar year.	Total mileage open on 31st December.	Total Capital outlay in thousands of rupees. *	Gross Earnings in thousands of rupees.	Total Working expenses.	
				Amount in thousands of rupees.	Proportion per cent. to gross earnings.
1	2	3	4	5	6
1898	22,024 (‖)	2,92,05,20	27,41,31	12,98,68	47·37
1899	23,507 (‖)	3,08,50,12	29,36,78	13,93,36	47·45
1900	24,704 (¶)	3,29,53,34	31,54,32	15,09,31	47·85
1901	25,332 (¶¶)	3,39,16,89	33,60,38	15,72,45	46·79
1902	25,898 (¶¶)	3,49,77,34	33,92,69	16,70,49	49·24

GROSS EARNINGS IN THOUSANDS

Calendar year.	Coaching traffic.							Goods		
	1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 17 to 22).	Total Goods Traffic (sum of 25 to 29).	General merchandise.	Coal and coke for the public and foreign railways.
16	17	18	19	20	21	22	23	24	25	26
1898	31,24	45,28	49,49	6,25,52	7,15	1,10,28	8,68,96	17,84,97	14,87,17	1,74,65
1899	31,52	46,97	52,08	6,70,81	8,01	1,13,19	9,22,58	19,19,82	16,10,55	1,80,41
1900	31,83	47,08	56,03	7,51,66	8,47	1,31,37	10,26,44	20,36,52	16,90,35	2,11,71
1901	32,78	52,43	64,39	8,48,25	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41	17,40,72	2,26,75

Number of passengers and quantity of goods carried, the average miles

PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND

Calendar year.	Total mileage open on 31st December.	1st Class.			2nd Class.			Intermediate Class.			3rd Class.		
		No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1898	22,024	611	74·67	12·40	2,253	48·22	4·93	5,073	58·53	3·13	131,512	37·58	2·29
1899	23,507	526	71·78	12·59	2,352	43·90	5·32	5,233	60·56	3·07	140,321	37·58	2·30
1900	24,704	531	74·65	12·59	2,285	44·04	5·49	5,703	58·93	3·11	153,954	39·16	2·31
1901	25,332	532	92·82	12·75	2,405	76·27	5·49	6,670	59·94	3·09	170,416	41·27	2·31
1902	25,898	563	102·28	12·86	2,539	82·39	5·21	6,813	61·30	3·11	171,716	41·08	2·33

* Excludes railways wholly under construction,
† This column represents the percentage of net
‡ Including season and vendors' tickets from 1898 to
** Included in the several classes up to 1900.
†† Includes miscellaneous train-mileage.
§ "Other expenses" include Steam-boat, Contribu
‖ Excludes the Cherra-Companyganj and Thatôn-
¶ Excludes the Thatôn-Duyinzaik and Powayan
¶¶ Excludes the Thatôn-Duyinzaik and Parlakimedi

DIX 12.

of working
treated as one System.
22, 24, 27, 37, 38, 43 and 45 of Report.)

OF WORKING.

NET EARNINGS.		PER MILE WORKED. (EXCLUDING STEAM-BOAT.)			PER TRAIN-MILE. (EXCLUDING STEAM-BOAT.)			Calendar year.
Amount in thousands of rupees.	Percentage on Capital outlay.†	Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
7	8	9	10	11	12	13	14	15
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
14,42,63	4·94	12,703	6,003	6,700	3·81	1·80	2·01	1898
15,43,42	5·00	12,788	6,055	6,733	3·78	1·79	1·99	1899
16,45,01	4·99	13,007	6,204	6,803	3·73	1·78	1·95	1900
17,87,93	5·27	13,236	6,179	7,057	3·79	1·77	2·02	1901
17,22,20	4·92	13,188	6,472	6,718	3·65	1·79	1·86	1902

OF RUPEES.

TRAFFIC.					WORKING EXPENSES IN THOUSANDS OF RUPEES.						Calendar year.
Military Stores.	Revenue stores, including coal and material for construction.	Miscellaneous.	Electric telegraph.	Steam-boat and sundries.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Other expenses. §	
27	28	29	30	31	32	33	34	35	36	37	38
21,19	81,38	20,58	7,49	79,89	3,13,72	4,29,55	1,33,39	2,19,56	1,36,42	66,04	1898
23,11	94,11	21,64	8,70	85,68	3,42,59	4,71,44	1,33,98	2,30,68	1,42,38	72,38	1899
13,78	93,32	27,36	7,93	83,43	3,61,79	5,26,50	1,39,31	2,49,27	1,47,43	85,01	1900
14,97	96,41	24,14	7,49	87,34	3,55,93	5,59,13	1,51,90	2,63,92	1,57,85	83,72	1901
23,67	1,14,93	19,34	7,32	86,88	3,89,67	5,78,85	1,76,38	2,73,70	1,63,70	88,19	1902

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED.					TRAIN-MILES RUN (IN THOUSANDS).				GOODS TRAFFIC.			Calendar year.
SEASON AND VENDORS' TICKETS.			TOTAL NO. OF PASSENGERS CARRIED.		Coaching.	Goods.	Mixed.	Total train-mileage, (††)	Tons carried (in thousands).	Average miles carried.	Average rate charged per mile in pies.	
No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.								
15	16	17	18	19	20	21	22	23	24	25	26	27
12,117	**	**	151,566	38·53	16,620	28,024	25,449	71,520	35,642	160·25	6·00	1898
13,288	**	**	161,720	38·48	17,039	30,612	26,879	77,207	39,748	155·15	5·98	1899
13,845	**	**	176,308	40·09	18,114	34,252	28,827	84,193	42,896	154·94	5·88	1900
14,726	8·63	1·41	194,749	40·42	19,701	34,274	31,561	88,265	43,392	162·75	5·77	1901
15,026	8·85	1·41	196,648	40·03	21,588	35,935	31,781	92,527	45,537	157·54	5·68	1902

but includes the State outlay on the Patri branch *vide* paragraph 14 of Report.
earnings on capital outlay, but does not represent the gain or loss to the State, for which information Appendix 7 should be consulted.
1900.

tion to Provident Fund and Special and Miscellaneous expenditure.
Duyinzaik Light railways.
Light railways.
Light railways.

Appendix 13.
Earnings by systems.

Gross earnings in **thousands** *of rupees*

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the key to

Gauge.	5′-6″																		
Class: No.	1	2			3	4		5	6			7			8			9	
		E. B. system.							North Western system.			G. I. P. system.			B., B. & C. I. system.			Niz.'s G. State system.	
Calendar year.	E. I.	5′ 6″ gauge.	Other gauges.	Total.	B. C.	B. N. (a) & (b).*	E. C. †	O. & R.	Commercial section.	Military section.	Total.	G. I. P. (a) to (c)	I. M. (d) to (h)	Total.	B., B. & C. I. (a) to (e) & (l) & (m)	R. M. (f) to (k).	Total	Niz.'s (a) & (b)	H. G. V. (c)
Passenger traffic.																			
1898 .	1,68.09	25,44	20,18	45,62	6,11	12,05	13,19	36,89	97,18	11,01	1,08,19	54,64	20,19	74,83	31,41	57,59	89,00	7,22	...
1899 .	1.72.54	26,90	20,97	47,87	6,29	19,47	19,92	38,48	99,45	11,40	1.10.85	63,60	21,13	84,73	43,22	61,07	1,04,29	7,56	9
1900 .	18,4.94	27,03	25,19	52,22	6,59	30,46	24,06	42,84	1,06,24	11,87	1.18.11	67,61	21,56	89,17	48,28	58,74	1,07,02	7,83	3,17
1901 .	1,96.91	28,16	25,42	53,58	7,12	53,98	...	51,49	1,16,60	13,44	1,30.04	81,42	25,04	1,06.46	51,18	68,55	1.19.73	8,06	7,22
1902 .	1,89.27	29,20	26,81	56,01	7,17	54,07	...	50,44	1,22,10	14,53	1,36,63	85,52	26,70	1,12,22	51,84	64,25	1,16,09	8,17	7,48
Parcels and luggage.																			
1898 .	14,50	2,34	1,71	4,05	61	1,11	50	2,47	10,52	1,34	11,86	12,86	2,51	15,37	6,23	6,26	12,49	92	...
1899 .	15,34	2,88	1,94	4,82	58	1,42	85	2,61	8,78	1,20	9,98	13,14	3,34	17,48	5,93	5,62	11,55	91	1
1900 .	18,41	3,31	2,30	5,61	49	2,89	1,45	3,20§	9,82	1,42	11,24	15,51	3,30	18,81	6,43	5,96	12,39	98	21
1901 .	18,10	3,30	2,30	5,60	52	3,55	...	3,58	11,04	1,59	12,63	14,89	3,03	17,92	6,65	6,06	12.71	104	49
1902 .	18,10	3,51	2,62	6,13	55	3,38	...	3,93	11,71	1,58	13,29	16,71	3,58	20,29	6,86	6,69	13,55	1,10	78
Goods traffic.																			
1898 .	4.16.02	54,25	33,31	87,56	2,54	48,05	11,76	49,49	2,46,46	17,39	2,63.85	2,74,62	41,94	3,16,56	1,18,50	1,58,57	2,77,07	31,45	...
1899 .	4.47.26	55,11	37,63	92,74	3,39	63,64	20,54	57,89	2,23,35	16,65	2,40.00	2,72,16	51,76	3.23.92	1,28,17	1,93,45	3.21.62	34,22	53
1900 .	4,79.03	60,16	43,11	1.03.27	5,26	91,62	32,08	55,74	1,78,38	17,59	1.95.97	2,52,59	84,60	3,37.19	1,32,11	2,28,06	3.60.17	42,56	6,76
1901 .	4.91.23	57,07	41,17	98,24	4,52	65,79	...	66,27	2,73,05	21,59	2.94.64	3,13,28	68,59	3.81.87	1,08,34	2,02,91	3,11,25	32,87	10,87
1902 .	4.78.75	64,71	43,82	1,08,53	4,25	77,27	...	64,75	2,71,87	19,58	2,91.45	3,11,23	75,23	3,86.46	1,06,94	1,86,32	2,93.26	35,36	12,76
Electric telegraph.																			
1898 .	1,06	19	14	33	2	17	11	27	84	14	98	70	22	92	48	77	1,25	18	...
1899 .	1,18	19	16	35	2	24	16	30	87	15	1,02	79	34	1,13	62	97	1,59	20	...
1900 .	96	19	16	35	2	26	16	29	84	15	99	72	27	99	55	82	1,37	16	6
1901 .	88	18	15	33	2	28	...	33	97	16	1,13	68	21	89	45	64	1,09	17	8
1902 .	91	16	15	31	2	27	...	33	91	15	1,06	71	19	90	45	58	1,03	16	10
Total gross earnings. **																			
1898 .	6.17,18	86,81	61,19	1,47.91	10,25	68,79	27,67	98,52	3,68,25	31,47	3,99.72	3,53,23	67,83	4.21.06	1,62,67	2,28,52	3.91,19	40,77	...
1899 .	6.55,07	90,53	67,45	1,57.98	11,40	90,78	43,42	1,11,39	3,44,93	30,68	3.75,61	3,62,54	79,88	4,42,42	1,82,07	2,67,26	4.49,33	44,23	63
1900 .	7.06,48	96,16	78,78	1.74.94	13,33	1,29,75	60,43	1,16,76	3,03,46	32,41	3,40.87	3,46,32	1,13,17	4,59.49	1,88,92	2,99,16	4.88,08	52,69	10,63
1901 .	7,30,48	94,44	76,48	1,70.92	14,05	1,30,78	...	1,34,68	4,14,73	38,17	4,52.90	4,18,15	1,00.02	5,18,17	1,70,58	2,84,69	4,55,27	43,55	20,10
1902 .	7.04,34	1,03,83	80,81	1.84.64	13,17	1,42,18	...	1,34,18	4,17,94	37,09	4,55,03	4,24,25	1,09.63	5,33.88	1,71,20	2,65,04	4,36.24	46,96	22,88
Net earnings.																			
1898 .	4,18.02	50,47	32,99	83,46	3,68	33,64	6,51	53,08	1,96,98	—40	1,96.58	1,50,03	30,26	1,80,29	88,08	1,29,55	2.17,63	23,70	...
1899 .	4,37,30	45,90	38,11	84,01	4,42	47,21	15,15	60,77	1,78,90	—7,19	1,71.71	1,67,15	34,47	2.01.62	96,31	1,52,78	2,49,09	26,87	36
1900 .	4,60,79	50,24	44,39	94,63	5,50	77,13	26,55	56,72	1,46,61	—2,47	1,44.14	1,64,15	59,65	2,20.80	88,33	1,64,35	2.52,68	30,81	4,21
1901 .	4,72,87	46,37	39,47	85,84	6,43	61,49	...	73,26	2,23,38	—44	2,22.94	2,17,30	51,04	2,68.34	94,67	1,53,12	2,47,79	28,05	9,23
1902 .	4,45.54	53,80	40,88	94,68	5,74	69,38	...	65,37	1,93,95	—4,88	1.89.07	2,11,38	53,96	2,65.34	87,37	1,39,25	2.26,62	28,23	9,68

* Excludes the Parlakimedi Light railway.
† Transferred partly to the Bengal-Nagpur railway and partly
‡ Excluding the Pondicherry railway. § Excluding the Hardwar-Dehra railway, for which
** "Total gross earnings" include earnings from steam
*** Included with the Southern
NOTE.—For net earnings of individual
NOTE.—For earnings per mile worked and per

DIX 13.

Appendix 13.
Earnings by systems.

of each Railway Administration.

22, 24, 27 and 43 of Report.)

the code letters used to denote railway systems.

5′ 6″		3′ 3¾″													2′ 6″					2′ 0″				Total.	Gauge.
10		12	13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32		Class No.
Madras System.							B. K. system.																		
Madras. (a) to (c)	Nilgiri. (d) & (e)	B. D.	D. S.	A. B.	D.	B. & N. W.	R. and K. (a) & (b)	P. L. (c)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g)	W. I. P. (h) ***	S. I.	B.	M. B. W	B L.	B. P	B K. L.	T. B.	D. H.	H. A.	H. S.	J.		Calendar year.
Passenger traffic.																									
34,91	...	43	1,11	6,83	26	23,04	5,24	...	4,58	85	8,57	18,12	37	43,37	41,73	2,06	16	67‖	...	32‖	2,25	1,83	67	12	7,58,68	1898
30,14	40	46	1,16	8,58	29	25,85	5,44	...	5,17	90	9,87	16,55	45	41,93	41,01	2,19	19	58	45‖	37	2,06	2,38	69	12	8,09,39	1899
35,27	84	58	1,29	9,08	30	29,45	5,57	...	4,56	82	9,28	25,16	49	47,73	48,72	2,17	23	67	65	39	2,20	2,39	70	12	8,95,07	1900
53,82	94	83	1,17	10,81	42	37,95	6,93	36	8,41	95	9,81	27,03	50	51,70	51,03	2,27	26	69	65	27	2,53	2,38	72	15	10,07,17	1901
57,49	192	96	1,22	10,47	26	42,54	7,01	41	8,55	95	8,54	30,15	...	56,36	53,09	1,98	24	70	70	29	2,73	2,41	74	22	10,27,48	1902
Parcels and luggage.																									
4,73	...	7	10	31	...	87	44	...	38	4	48	2,19	...	¶1,71	1,33	16	2	...	...	...	72	...	...	...	77,43	1898
4,54	8	7	12	40	...	99	26	...	34	5	50	2,19	...	1,71	1,32	15	2	...	....	..	59	...	...	...	78,88	1899
5,04	22	8	12	42	...	1,18	49	...	41	5	50	2,62	...	1,88‡	1,55	15	2	...	...	...	61	...	...	...	91,02	1900
5,96	28	11	11	43	1	1,42	54	1	64	5	42	2,67	6	2,03	1,82	14	2	2	2	...	74	1	...	...	93,65	1901
6,66	36	10	12	46	...	1,69	56	1	79	5	40	3,36	...	2,30	1,87	13	2	2	3	...	87	1	1	...	1,00,92	1902
Goods traffic.																									
66,52	...	1,96	6,67	5,36	5	32,49	7,28	...	8,04	51	10,01	48,85	1,11	39,00	44,53	1,36	1,09	6	...	49	4,32	5	4	83	17,34,97	1898
69,05	35	2,08	7,42	6,47	4	41,44	8,99	...	14,62	1,09	11,09	54,24	3,43	41,99	43,00	1,67	1,32	6	1	52	4,27	11	4	88	19,19,82	1899
69,27	61	2,49	7,70	6,72	4	40,07	8,50	...	12,64	2,26	12,85	55,89	1,77	39,73	57,07	1,74	97	9	2	50	5,01	15	5	73	20,36,52	1900
97,21	1,10	3,41	8,18	8,80	5	47,17	9,08	29	12,53	1,17	7,90	48,58	1,93	47,74	62,73	1,01	1,38	11	1	45	4,35	21	6	67	21,23,67	1901
94,73	2,02	3,61	7,33	7,96	3	47,09	9,76	33	14,53	1,12	7,09	56,26	...	48,84	66,83	71	1,21	11	3	44	4,62	22	7	63	21,23,41	1902
Electric telegraph.																									
17	...	...	11	12	...	29	7	...	30	1	16	37	...	¶ 22	29	5	...	...	...	1	3	...	...	...	7,49	1898
17	...	...	10	14	...	33	10	...	43	1	21	38	...	22	28	7	...	...	...	2	4	...	...	1	8,70	1899
15	...	1	11	13	...	31	8	...	41	2	18	29	...	25	26	7	...	...	...	2	3	...	...	...	7,93	1900
21	...	1	11	15	...	34	8	...	33	1	14	24	6	25	27	4	...	...	...	2	3	...	...	...	7,49	1901
21	...	2	9	15	...	33	7	...	32	1	14	29	...	25	25	4	...	...	...	2	3	...	...	1	7,52	1902
Total gross earnings **																									
1,09,69	...	2,69	8,37	13,08	32	64,76	14,96	...	13,60	1,44	20,04	71,70	2,21	87,65	89,91	3,76	1,30	74	...	86	7,55	1,90	76	96	27,41,31	1898
1,07,73	84	2,73	9,22	16,20	33	77,83	17,38	...	20,84	2,11	22,43	75,87	5,72	87,90	88,26	4,20	1,56	66	46	95	7,15	2,51	73	96	29,36,78	1899
1,13,39	1,76	3,49	9,67	17,10	35	80,47	16,91	...	18,22	3,18	23,63	86,89	3,34	91,95	1,10,30	4,23	1,24	77	69	96	8,09	2,56	76	87	31,54,32	1900
1,62,73	2,41	4,87	9,99	21,34	48	97,21	17,57	67	22,38	2,22	18,96	81,12	3,68	1,05,26	1,18,85	3,59	1,68	83	69	84	7,88	2,61	79	83	38,60,38	1901
1,66,04	4,44	5,27	9,10	20,96	30	1,01,50	18,64	76	25,02	2,17	16,85	93,17	...	1,10,10	1,25,03	3,05	1,50	84	76	85	8,50	2,65	82	87	38,92,69	1902
Net earnings.																									
56,03	...	1,15	2,87	54	7	36,67	7,24	...	8,09	62	8,28	21,39	—1,16	39,38	37,88	1,64	24	21	...	20	3,48	78	21	20	14,42,63	1898
51,29	20	1,18	4,71	3,23	6	41,51	8,69	...	12,72	1,05	10,79	24,44	164	40,95	35,79	1,70	65	12	8	26	2,57	1,18	21	—6	15,48,42	1899
54,37	1,01	1,94	4,81	3,64	7	40,89	8,76	...	10,18	1,86	11,75	30,60	—66	45,29	48,95	1,59	42	21	19	26	3,62	1,29	27	—15	16,45,01	1900
79,09	1,38	2,45	4,85	4,56	18	53,87	9,68	20	9,94	94	8,10	23,97	—49	55,97	49,89	1,26	79	25	15	17	3,14	1,15	24	—4	17,87,93	1901
74,95	1,85	2,58	4,12	2,54	6	54,46	9,88	23	11,96	97	6,83	32,52	...	59,13	52,73	1,13	53	25	21	22	3,78	1,33	32	—3	17,22,20	1902

for which information is not available.
to the Madras railway from the 1st January 1901.
information is not available. ‖ Total coaching traffic. ¶ Excluding the Karaikkal-Peralam and Pondicherry railways.
boat and other items not shown in details above.
Mahratta railway from 1902.
railways, see Appendix 7.
train-mile, see Appendices 22 and 23.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average

(Referred to in paragraph

Gauge.	5' 6" Gauge.											
Class: No.	* 1			2			3			4		
Railway.	East Indian.			Eastern Bengal State.			Bengal Central.			Bengal-Nagpur system. Bengal-Nagpur. (a) & (b)		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1st class passengers.												
1898	64,2	124·42	15·24	44,6	51·76	13·29	2,9	37·34	9·73	6,9	103·08	13·53
1899	66,0	120·23	15·63	47,6	50·61	12·89	2,8	38·78	12·00	6,6	112·13	13·59
1900	64,8	121·44	15·16	45,0	51·53	13·61	2,3	43·21	14·21	8,6	187·42	13·66
1901	64,2	130·27	14·68	42,4	52·06	13·85	1,9	44·27	14·55	11,4	135·19	15·07
1902	63,0	142·34	14·71	39,7	61·05	13·94	2,1	45·03	14·13	13,3	155·75	14·54
2nd class passengers.												
1898	185,1	118·96	6·43	137,2	46·34	6·21	36,0	26·97	4·85	16,3	77·88	5·85
1899	186,9	111·14	6·76	132,0	47·92	6·25	23,9	29·03	6·09	21,2	79·51	5·78
1900	185,8	122·14	6·54	126,5	47·33	6·50	23,3	22·97	7·40	25,4	77·55	8·18
1901	197,5	138·40	6·16	126,8	52·13	6·48	19,5	30·35	7·35	38,6	140·78	6·17
1902	215,1	136·37	6·04	117,1	56·86	6·54	18,3	30·44	7·20	38,5	145 54	5·91
Intermediate class passengers.												
1898	1,304,1	52·94	3·29	919,5	31·42	3·00	48,9	37·82	3·25	18,9	43·86	2·82
1899	1,314,9	52·26	3·33	946,7	29·07	3·01	48,5	34·17	3·50	27,4	52·87	2·83
1900	1,431,9	52·39	3·28	982,8	28·22	3·08	53,4	32·28	3·50	36,7	64·82	2·93
1901	1,530,8	52·87	3·31	991,5	31·59	2·99	61,4	37·99	3·47	1,63,7	67·49	3·23
1902	1,620,5	57·01	3·13	1,065,3	31·02	3·04	63,9	38·13	3·47	1,49,1	73·26	3·24
3rd or lowest class passengers.												
1898	16,667,2	60·48	2·51	9,114,0	30·70	2·50	1,482,6	21·90	2·94	2,136,7	48·15	1·99
1899	17,367,6	56·75	2·51	9,929,0	29·95	2·56	1,514,8	22·43	2·90	2,815,0	60·72	1·98
1900	18,737,5	59·80	2·51	10,947,8	30·15	2·50	1,539,9	22·41	3·00	3,585,4	71·98	2·11
1901	20,627,4	62·45	2·46	10,891,0	31·22	2·44	1,619,5	24·79	3·00	5,717,1	71·84	2·28
1902	19,784,1	61·20	2·45	11,201,9	30·89	2·51	1,614,7	24·82	3·00	6,107,2	66·37	2·31
Season and vendors' tickets.												
1898	1,173,7	...	...	788,9	2·55	9·78	142,6	...	...	68,6	...	...
1899	1,221,1	...	...	847,4	9·51	2·74	141,5	...	...	66,7	...	...
1900	1,307,8	...	...	863,8	9·19	2·73	164,2	...	...	37,7	...	...
1901	†1,446,2	11·32	1·82	1,219,9	10·36	2·51	†92,2	5·68	3·08	90,2	8·86	1·80
1902	1,563,1	11·52	1·70	1,234,8	10·06	2·49	212,2	5·48	3·05	163,7	8·81	1·76
Total of all classes.												
1898	19,394,3	60·79	2·73	11,004,2	29·32	2·73	1,713,0	22·57	3·03	2,246,5	48·46	2·12
1899	20,156,5	60·01	2·73	11,992,7	28·76	2·70	1,731,5	22·95	3·04	2,936,9	60·88	2·09
1900	21,727,8	60·07	2·72	12,965,9	28·85	2·65	1,783,1	22·79	3·12	3,693,8	72·02	2·10
1901	23,875,1	59·87	2·64	13,271,6	29·61	2·62	1,885,5	23·35	3·11	6,021,0	71·34	2·40
1902	23,255,8	58·52	2·67	13,643,8	29·32	2·69	1,911,2	23·19	3·10	6,471,8	65·73	2·44

	Average cost of carrying each passenger per mile in pies.			
1898	0·73	1·13	1·49	1·76
1899	0·75	1·25	1·43	1·09
1900	0·76	1·24	1·23	0·74
1901	0·76	1·20	1·05	1·06
1902	0·83	1·13	1·25	1·05
	Average profit from carriage of each passenger per mile in pies.			
1898	2·00	1·56	1·54	0·36
1899	1·98	1·43	1·60	1·00
1900	1·96	1·43	1·88	0·46
1901	1·88	1·41	2·06	1·56
1902	1·85	1·55	1·85	1·39

N.B.—Except in the case of Eastern Bengal State railway, the average distance and average rate for season

† Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

DIX 14.

Appendix 14.
Number of Passenges.

distance travelled by, and average rate charged to, each passenger.

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5′ 6″ GAUGE—*continued.*															GAUGE.
			5			6			7						Class No.
EAST COAST STATE.			OUDH AND ROHILKHAND STATE.			NORTH WESTERN STATE. (*a*) to (*h*).			GREAT INDIAN PENINSULA SYSTEM.						
									GREAT INDIAN PENINSULA. (*a*) to (*c*).			INDIAN MIDLAND ¶ (*a*) to (*h*).			Railway.
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Calendar year.
1ST CLASS PASSENGERS.															
4,8	53·35	17·18	22,5	90·75	11·26	154,3	51·29	10·42	69,6	87·30	10·72	11,1	197·83	10·41	1898
6,8	91·54	15·54	22,0	93·20	11·37	52,6	116·12	10·89	72,8	82·18	10·95	14,3	186·02	10·80	1899
7,2	130·11	15·23	29,1	87·14	11·52	48,2	135·33	10·72	67,9	88·12	10·56	11,2	175·95	10·80	1900
†	†	†	28,9	89·69	11·45	53,6	132·66	10·37	69,7	131·51	10·94	12,2	175·18	11·35	1901
†	†	†	32,5	97·70	11·50	57,0	131·21	10·84	71,3	152·24	10·95	13,7	229·86	10·68	1902
2ND CLASS PASSENGERS.															
13,7	29·21	8·84	72,3	93·12	4·13	196,2	157·62	3·75	349,1	45·74	3·72	43,3	169·89	4·30	1898
22,7	56·55	7·56	68,8	86·46	5·36	173,6	106·38	4·61	306,7	41·55	4·14	43,1	156·46	4·58	1899
23,8	70·22	6·79	91,1	86·48	5·31	170,5	100·43	4·84	325,0	36·62	4·14	37,3	150·62	5·26	1900
†	†	†	105,2	83·58	5·24	188,8	120·99	4·21	388,8	99·93	4·30	43,5	158·85	5·31	1901
†	†	†	114,2	93·59	5·07	204,4	121·90	4·33	433,2	122·79	3·74	51,5	191·92	4·4	1902
INTERMEDIATE CLASS PASSENGERS.															
8,0	51·94	4·48	395,3	41·66	3·36	700,9	67·72	3·01	321,9	110·71	3·00	353,2	77·03	2·97	1898
19,0	85·60	4·39	347,0	44·30	3·34	744,5	64·83	3·01	364,4	114·62	3·00	319,1	82·03	3·00	1899
15,5	93·90	4·42	392,9	45·55	3·37	916,6	65·32	3·01	465,3	106·37	3·00	292,4	83·37	2·97	1900
†	†	†	507,7	44·87	3·05	1,328,8	55·87	3·01	553,3	101·64	3·00	312,3	83·76	2·97	1901
†	†	†	605,9	45·39	3·03	1,307,5	58·33	3·02	563,0	111·04	3·00	271,1	99·16	2·95	1902
3RD OR LOWEST CLASS PASSENGERS.															
2,653,1	31·53	2·33	5,485,9	43·57	2·50	15,300,9	50·52	2·26	9,105,0	28·00	1·90	1,411,9	69·20	2·55	1898
3,652,5	38·66	2·48	5,954,9	42·47	2·50	16,286,3	44·08	2·26	10,520,3	29·32	1·91	1,659,5	100·14	2·25	1899
4,340,9	39·21	2·47	6,482,4	42·46	2·51	17,054,4	50·06	2·26	11,715,2	28·93	1·91	1,884,8	61·20	2·55	1900
†	†	†	8,122,0	41·95	2·47	18,722,4	49·50	2·27	13,819,0	39·57	2·00	2,160,0	63·41	2·55	1901
†	†	†	7,579,8	43·27	2·43	19,253,1	50·46	2·27	12,472,0	42·12	2·09	2,212,2	64·57	2·58	1902
SEASON AND VENDORS' TICKETS.															
58,6	...	...	...	...	...	...	...	...	4,405,8	...	...	3	...	...	1898
73,8	...	...	...	...	...	...	...	...	4,820,3	...	...	8	...	...	1899
72,0	...	...	...	...	...	...	...	...	5,117,5	...	...	10	...	...	1900
†	†	†	...	...	...	...	...	...	5,278,0	7·03	0·95	6	7·44	10·75	1901
†	†	†	...	...	...	...	...	...	4,809,5	7·39	1·12	2	13·33	12·00	1902
TOTAL OF ALL CLASSES.															
2,738,2	31·60	2·43	5,976,0	44·22	2·68	16,352,3	52·26	2·43	14,251,4	31·42	2·34	1,822,3	74·05	2·87	1898
3,765,8	39·02	2·60	6,392,7	43·22	2·67	17,257,0	45·82	2·42	10,144,5	32·36	2·34	2,034,2	69·42	2·88	1899
4,459,4	39·73	2·60	6,994,9	43·37	2·71	18,189,7	51·59	2·41	17,690,9	31·72	2·31	2,220,7	66·51	2·85	1900
†	†	†	8,764,4	43·79	2·64	20,293,6	50·80	2·42	20,109,4	34·22	2·27	2,528,6	68·29	2·83	1901
†	†	†	8,332,4	44·31	2·62	20,822,0	51·87	2·43	18,349,0	37·47	2·39	2,548,7	72·07	2·87	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
1·53			1·20			1·13			2·34			1·45			1898
1·25			1·12			1·19			1·91			1·66			1899
1·92			1·31			1·30			1·65			1·61			1900
†			1·06			1·18**			1·48						1901
†			1·18			1·39			1·53						1902
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
0·90			1·48			1·29			0·00			1·42			1898
1·35			1·55			1·23			0·43			1·22			1899
1·58			·40			1·11			0·66			1·24			1900
†			1·58			1·24**			0·90						1901
†			1·44			1·04			0·96						1902

and vendors' tickets for the years 1898 to 1900 are included under the several classes, as the information is not available separately.

§ Third class by mail trains. ‖ Third class by other than mail trains.

¶ Includes the Gwalior Light (2′ 6″ gauge) in the case of number only, which is shown under 3rd or lowest class and total, as details by classes are not furnished.

** Excludes the Nowshera-Durgai railway.

P. T. O.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average

(Referred to in paragraph

GAUGE.	5′ 6″ GAUGE—*concluded.*														
CLASS: No.	8						9						10		
	BOMBAY, BARODA AND CENTRAL INDIA SYSTEM.						NIZAM'S GUARANTEED STATE SYSTEM.						MADRAS		
RAILWAY.	Bombay, Baroda and Central India. (*a*) to (*e*), (*l*) and (*m*).			Kajputana-Malwa (*f*) to (*k*). (3′ 3⅜″).			Nizam's Guaranteed State (*a*) and (*b*).			Hyderabad-Godavari Valley. (*c*) (3′ 3⅜″).			Madras. (*a*) to (*c*).		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1ST CLASS PASSENGERS.															
1898	71,5	19·67	9·67	20,9	88·86	13·34	7,4	81·81	15·10	...	...	...	24,8	126·28	11·23
1899	78,1	20·39	9·71	20,5	92·36	13·52	7,0	89·70	15·24	...	...	...	24,1	136·36	10·79
1900	76,9	20·56	9·66	20,8	84·47	13·34	6,5	82·31	15·13	2,2	68·47	11·56	22,4	141·60	11·32
1901	21,4	35·65	10·97	19,6	97·15	13·35	6,1	88·03	14·49	3,6	99·36	11·29	28,8	129·43	13·04
1902	69,2	38·64	11·25	23,4	103·01	13·65	6,8	92·48	14·39	4,2	99·90	10·87	30,3	142·89	13·04
2ND CLASS PASSENGERS.															
1898	513,9	13·06	4·57	91,4	79·11	5·89	35,3	86·53	4·59	...	...	...	89,5	87·79	4·82
1899	606,1	14·80	4·65	82,7	84·13	6·09	36,3	87·65	4·69	7	...	...	102,4	88·55	4·73
1900	595,5	14·62	4·20	75,3	81·68	6·33	34,2	77·86	4·96	17,6	64·73	5·06	95,4	88·94	4·71
1901	550,1	28·51	5·58	87,9	91·14	5·91	37,9	84·93	4·44	22,6	68·98	4·76	111,2	94·53	6·27
1902	555,0	27·62	5·68	91,0	84·98	6·31	40,6	80·49	4·57	27,2	85·69	4·57	120,3	98·73	6·00
INTERMEDIATE CLASS PASSENGERS.															
1898	305,3	106·61	2·99	227,2	68·75	2·99	‡ 252,5	35·18	2·50	...	...	...	...	...	...
1899	383,3	110·61	2·99	259,5	68·78	2·99	255,2	35·12	2·50	...	...	...	...	...	...
1900	404,4	107·50	2·99	275,3	68·17	2·98	236,2	35·05	2·50	...	...	...	...	...	...
1901	420,6	110·66	2·99	308,1	66·53	2·98	271,2	35·45	2·50	...	...	...	19,2	93·31	4·50
1902	378,1	120·52	2·99	288,0	67·53	2·99	271,7	36·00	2·50	...	...	...	20,9	97·33	4·52
3RD OR LOWEST CLASS PASSENGERS.															
1898	8,379,9	14·49	2·27	10,502,4	47·22	2·00	§ 911,2	50·23	2·00	...	...	...	8,935,2	29·48	2·10
1899	10,634,0	16·68	2·30	10,829,6	48·44	2·00	913,8	51·99	2·00	17,9	...	...	7,660,1	28·24	2·11
1900	11,487,6	18·22	2·32	10,736,7	46·95	2·00	1,011,4	50·70	2·00	573,4	48·22	2·00	8,454,3	30·97	2·11
1901	12,713,8	22·99	2·42	12,451,8	47·49	2·00	1,081,6	48·24	2·00	1,145,0	54·04	2·00	11,507,3	34·98	2·25
1902	12,069,8	22·66	2·47	11,683,3	46·83	2·00	1,421,4	37·51	1·98	1,180,9	53·85	2·00	12,144,7	34·96	2·26
SEASON AND VENDORS' TICKETS.															
1898	4,631,6	...	...	3,5	...	...	5,7	...	...	...	...	...	494,1	...	...
1899	5,204,5	...	...	5,3	...	...	18,0	...	...	...	...	...	505,1	...	...
1900	5,285,2	...	...	4,8	...	...	14,9	...	...	1	...	...	519,4	...	...
1901	5,387,9	7·99	1·44	6,0	32·37	1·99	12,0	31·35	6·20	5,3	44·71	6·56	610,9	14·82	0·55
1902	5,821,5	7·92	1·41	5,3	28·34	1·99	9,8	28·08	2·58	4,0	94·33	3·08	688,9	14·94	0·56
TOTAL OF ALL CLASSES.															
1898	13,906,2	16·44	2·64	10,845,4	48·02	2·12	1,212,1	48·37	2·37	...	18,7	43·35	2·28	9,543,6	30·47	2·30
1899	16,906,0	18·68	2·64	11,197,6	49·31	2·13	1,230,8	49·90	2·38	588,3	48·82	2·13	8,291,7	29·54	2·36
1900	17,849,6	19·97	2·60	11,112,9	47·38	2·12	1,342,3	48·91	2·34	1,176,5	54·74	2·15	9,091,5	32·10	2·32
1901	18,143,8	20·79	2·61	12,873,7	48·31	2·12	1,408,8	47·47	2·32	1,216,3	50·48	2·15	12,277,4	34·82	2·42
1902	18,893,6	20·28	2·60	12,091,0	47·70	2·14	1,750,3	38·86	2·31				13,005,1	34·84	2·43
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
1898	* 1·40			† 0·84			0·85			...			1·05		
1899	1·39			0·78			0·82			1·44			1·19		
1900	1·39			0·87			0·87			1·32			1·11		
1901	1·31			0·79			0·78			1·27			0·95		
1902	1·49			0·95			0·95			1·40			1·21		
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
1898	* 1·19			† 1·31			1·52			...			1·26		
1899	1·21			1·35			1·56			0·84			1·17		
1900	1·17			1·25			1·47			0·81			1·21		
1901	1·30			1·33			1·54			0·88			1·47		
1902	1·08			1·19			1·36			0·75			1·23		

* Includes the Godhra-Rutlam-Nagda (5′6″ gauge) railway, but excludes Gaekwar's Dabhoi and Rajpipla (2′6″ gauge) railways.

†Excludes the Godhra-Rutlam-Nagda (5′ 6″ gauge) railway. ‡ Third class by mail trains. § Third-class by other than mail trains.

N.B.—The average distance and average rate for season tickets for the years 1898

DIX 14—*continued.*

distance travelled by, and average rate charged to, each passenger.

24 of Report).

	3′ 3½″ GAUGE.												GAUGE.
	12			13			14			15			CLASS & No.
SYSTEM. S. C. & N. (*d*) & (*e*) (3′ 3½″).	BENGAL DOOARS.			DIBRU-SADIYA.			ASSAM-BENGAL.			DEOGHUR.			RAILWAY.
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Calendar year.
1ST CLASS PASSENGERS.															
...	...	...	6	23·72	25·35	4·1	19·48	22·14	3,3	65·77	15·27	1,0	4·79	20·04	1898
1,5	16·85	76·00	5	23·80	26·27	4,3	21·39	21·92	3,8	61·92	15·07	1,0	4·79	20·04	1899
3,2	16·69	76·00	6	23·69	27·36	3,8	28·86	22·18	3,9	63·76	15·23	1,0	4·79	20·04	1900
3,3	16·65	76·00	7	16·68	20·67	4,5	19·92	22·10	4,0	66·90	15·15	2,2	4·79	... §§	1901
3,8	21·06	74·85	6	17·63	28·63	4,0	19·63	21·96	4,5	68·51	14·94	2	...	...	1902
2ND CLASS PASSENGERS.															
...	...	...	1,5	23·59	14·02	2,9	21·58	11·31	6,6	54·94	7·69	...	...	...	1898
2,9	16·13	38·00	1,6	21·19	14·88	2,9	23·12	11·28	8,7	54·89	7·73	...	...	...	1899
5,7	16·28	38·00	1,5	19·67	16·20	2,9	22·30	11·31	9,2	58·22	7·62	...	...	...	1900
5,9	16·18	38·00	1,9	16·43	16·82	3,0	20·86	11·38	10,3	56·13	7·70	...	...	...	1901
10,9	22·62	26·54	2,3	17·32	15·88	3,0	21·04	11·38	10,7	58·80	7·50	...	...	...	1902
INTERMEDIATE CLASS PASSENGERS.															
...	...	...	1,2	24·79	4·82	...	...	...	...	...	...	...	...	...	1898
...	...	...	1,6	23·47	4·61	...	...	...	...	...	...	...	...	...	1899
...	...	...	1,5	21·90	4·98	...	...	...	1,2	43·28	4·50	...	...	...	1900
...	...	...	2,5	17·87	5·00	...	...	...	5,3	47·72	4·50	...	...	...	1901
...	...	...	5,5	15·32	4·72	...	...	...	5,9	51·87	4·47	...	...	...	1902
3RD OR LOWEST CLASS PASSENGERS.															
...	...	...	145,6	16·04	3·09	229,0	20·44	4·02	1,268,2	33·49	3·00	188,9	4·79	5·53	1898
45,1	10·97	7·4	161,4	16·03	3·00	236,7	22·55	4·00	1,410,1	37·21	3·00	222,0	4·79	5·11	1899
73,3	11·84	7·50	217,9	15·35	3·00	272,3	20,30	4·00	1,532,5	35·20	3·00	231,0	4·79	4·27	1900
65,8	16·72	7·09	311,2	15·96	3·00	282,8	17·63	4·00	1,720,9	38·34	3·00	326,7	4·79	... §§	1901
322,2	22·13	3·42	354,0	16·03	3·00	293,3	17·69	4·00	1,742,4	36·38	3·00	184,8	...	...	1902
SEASON AND VENDORS' TICKETS.															
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1898
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1899
1,2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1900
1,2	12·70	1·90	...	...	...	...	...	...	...	...	...	...	...	...	1901
2,0	11·27	1·49	...	...	...	...	...	...	...	...	...	...	...	...	1902
TOTAL OF ALL CLASSES.															
...	...	...	148,9	16·22	3·31	236,0	20·44	4·42	1,218,1	34·68	3·10	189,0	4·79	5·60	1898
50,0	11·52	13·37	165,1	16·16	3·30	243,9	20·59	4·86	1,422,6	36·87	3·10	223,0	4·79	5·18	1899
83,4	12·75	15·10	221,5	15·45	3·24	279,0	20·34	4·35	1,546,8	36·37	3·09	232,0	4·79	5·34	1900
76,2	16·61	13·74	316,3	15·98	3·16	289,9	17·70	4·38	1,740,3	38·54	3·09	328,9	4·79	5·62	1901
338,9	22·07	4·94	362,4	16·03	3·16	302,3	17·74	4·35	1,763,5	36·65	3·11	185,0	...	...	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
...			** 3·90			‖ 3·36			1·82						1898
...			3·78			3·00			1·25						1899
...			3·48			2·52			1·37			Information not furnished.			1900
7·89			2·88			3·00			1·80			3·54			1901
3·14			§§			...			2·18			...			1902
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
...			** −0·59			‖ 1·06			1·28						1898
...			−0·48			1·86			1·85						1899
...			−0·22			1·83			1·72			Information not furnished.			1900
5·82			0·18			1·38			1·29			2·08			1901
1·80			§§			...			0·93			...			1902

** Excludes the Bengal Dooars extensions. ‖ Excludes the Ledo and Tikak Margherita colliery branch railway. ¶ Intermediate class introduced from 1st October 1900.

to 1900 are included under the several classes, as the information is not available separately. §§ Information not furnished.

P. T. O.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average

(Referred to in paragraph

GAUGE	3' 3½" GAUGE—*continued.*																	
CLASS: No.	16			17						18			19			20		
RAILWAY.	BENGAL AND NORTH-WESTERN.			ROHILKUND AND KUMAON SYSTEM. ROHILKUND AND KUMAON (*a*) and (*b*).			POWAYAN LIGHT. (*c*)			JODHPUR-BIKANER.			UDAIPUR-CHITOR.			BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1ST CLASS PASSENGERS.																		
1898	16,5	28'44	21'43	4,7	53'33	27'02	...	...	...	1,7	79'26	18'00	4	67'19	16'34	8,5	48'99	11'10
1899	17,5	33'27	17'03	4,6	52'74	26'64	...	...	...	1,2	80'32	18'00	8	36'82	18'00	7,8	48'65	11'01
1900	17,2	40'96	12'67	4,6	50'02	26'37	...	...	...	2,0	28'88	18'00	4	60'11	17'96	6,7	45'48	11'13
1901	18,5	41'56	12'69	5,3	52'38	26'47	3	...	...	2,7	96'00	14'40	5	56'08	17'99	6,8	46'80	11'24
1902	24,5	34'21	13'14	5,5	52'04	26'32	2	...	...	3,1	95'90	14'73	5	60'06	17'81	5,2	48'80	11'26
2ND CLASS PASSENGERS.																		
1898	24,6	31'94	10'17	17,4	69'98	9'77	...	...	...	7,0	68'82	6'00	1,4	56'42	8'56	57,4	41'20	5'45
1899	25,3	41'13	7'87	15,9	63'52	11'17	...	...	...	6,9	69'76	6'00	1,3	51'55	9'00	60,2	42'71	5'44
1900	28,7	46'03	6'06	15,9	69'51	9'82	...	...	...	7,1	66'80	6'00	1,1	57'32	9'00	48,8	42'04	5'44
1901	32,0	51'66	5'89	19,4	83'25	7'79	5	...	...	16,8	80'00	5'96	1,3	57'32	9'00	46,9	42'80	5'55
1902	33,2	59'19	5'53	21,4	89'74	7'28	8	...	...	16,8	82'25	6'00	1,5	57'75	8'85	40,8	43'50	5'66
INTERMEDIATE CLASS PASSENGERS.																		
1898	62,2	26'19	5'01	10,7	40'13	4'00	...	...	...	...	...	...	2,2	52'06	4'00	...	...	...
1899	65,7	33'65	4'01	12,7	39'41	4'01	...	...	...	...	...	...	1,9	51'34	3'00	1,6	50'88	4'00
1900	79,7	42'97	3'06	11,5	40'54	3'75	...	...	...	...	...	...	2,4	56'04	3'00	42,6	38'08	4'82
1901	112,4	43'93	3'04	14,0	40'13	4'00	...	...	...	...	...	...	2,5	51'46	3'00	45,2	46'29	4'00
1902	130,7	44'48	3'05	15,1	40'48	4'00	...	...	...	...	...	...	2,9	50'48	2'99	49,0	45'01	4'00
3RD OR LOWEST CLASS PASSENGERS.																		
1898	6,082,8	33'86	2'00	1,988,2	33'52	2'20	...	...	...	760,0	54'42	2'00	175,9	41'24	2'05	1,568,3	34'01	2'75
1899	6,916,6	35'54	2'00	1,139,7	33'88	2'20	...	...	...	869,1	54'47	2'00	185,8	42'84	2'00	1,811,0	34'27	2'75
1900	7,871,8	33'81	2'00	1,186,0	34'64	2'18	...	...	...	778,5	53'58	2'00	165,4	43'00	2'00	1,722,4	32'63	2'75
1901	9,637,3	36'02	2'00	1,500,2	33'56	2'19	221,1	...	...	1,447,6	50'00	2'05	184,8	45'44	1'99	1,724,4	34'78	2'75
1902	9,935,8	39'12	2'00	1,550,3	32'52	2'19	257,1	...	...	1,358,1	54'30	2'06	173,3	41'47	1'99	1,393,9	37'12	2'75
SEASON AND VENDORS' TICKETS.																		
1898	60,9	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2,6	...	...
1899	69,7	...	...	...	...	...	...	...	...	...	...	...	4	...	...	2,5	...	...
1900	67,6	...	...	...	...	...	...	...	...	...	...	...	5	...	...	16,1	...	...
1901	1,6	40'00	3'43	...	...	...	...	...	...	...	...	...	...	...	...	18,9	4'19	3'20
1902	1,6	40'00	4'12	...	...	...	...	...	...	...	...	...	5	...	...	17,1	2'93	3'29
TOTAL OF ALL CLASSES.																		
1898	6,247,0	33'76	2'10	1,121,0	34'23	2'62	...	...	...	768,7	54'62	2'09	180,1	41'54	2'20	1,636,8	34'34	2'93
1899	7,094,8	35'57	2'07	1,171,9	34'42	2'59	...	...	...	877,2	54'63	2'07	190,2	42'96	2'12	1,883,1	34'62	2'90
1900	8,065,0	34'03	2'06	1,218,0	34'64	2'53	...	...	...	786,6	53'73	2'07	169,8	43'28	2'13	1,836,6	33'05	2'93
1901	9,801,5	36'17	2'06	1,539,1	34'31	2'52	221,9	...	...	1,467,1	54'00	2'16	189,1	45'63	2'12	1,842,2	35'00	2'92
1902	10,125,8	39'24	2'06	1,592,3	33'43	2'53	258,1	...	...	1,378,0	54'74	2'18	178,7	48'98	2'13	1,506,0	37'20	2'93
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.																		
1898	0'82			1'05			.....			0'89			4'50			1'83		
1899	0'90			1'08			.....			0'84			1'35			1'53		
1900	0'94			1'02			.....			0'98			1'35			1'52		
1901	0'82			1'06			.....			1'22			1'54			1'62		
1902	0'94			1'08			.....			1'23			1'50			1'73		
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.																		
1898	1'28			1'57			.....			1'20			0'70			1'10		
1899	1'17			1'51			.....			1'23			0'77			1'37		
1900	1'12			1'51			.....			1'09			0'78			1'41		
1901	1'24			1'46			.....			0'94			0'58			1'30		
1902	1'12			1'45			.....			0'94			0'63			1'20		

† Fares by mail train between Madras and

N.B.—The average distance and average rate for season and vendors' tickets for the years

DIX 14—*continued.*

distance travelled by, and average rate charged to, each passenger.

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3′ 3⅜″ GAUGE—*concluded.*													2′ 6″ GAUGE.			GAUGE.
21						22			23			24			CLASS No.	
SOUTHERN MAHRATTA.						SOUTH INDIAN.			BURMA.			MORVI.			RAILWAY.	
SOUTHERN MAHRATTA.			WEST OF INDIA PORTUGUESE.													
Number in hundreds.	Average distance travelled by each in miles	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Calendar year.	
1ST CLASS PASSENGERS.																
16,2	100·90	11·33	1,1	20·30	12·00	16,6	56·71	11·68	23,3	48·83	13·92	2,5	53·35	14·30	1898	
15,6	88·57	11·33	1,9	15·41	12·00	16,8	54·05	11·65	22,9	48·92	13·83	1,9	54·42	14·64	1899	
17,0	93·96	11·27	1,7	18·29	12·00	16,7	51·11	11·62	22,8	54·40	14·35	1,6	58·15	14·65	1900	
15,8	98·03	11·27	1,8	18·87	12·00	18,1	79·00	11·81	25,3	66·85	15·01	1,8	56·56	12·56	1901	
18,6	99·25	12·06	§	§	§	20,4	82·48	11·89	25,6	62·16	16·40	1,5	61·20	12·33	1902	
2ND CLASS PASSENGERS.																
47,8	91·72	4·98	8,5	14·34	6·00	99,1	45·58	5·69	170,0	26·62	6·64	9,8	53·83	7·26	1898	
69,9	75·33	5·32	11,0	14·07	6·00	93,5	47·54	5·85	163,1	25·84	6·46	9,3	54·92	7·38	1899	
68,2	79·67	5·36	12,5	14·72	6·00	91,2	55·16	5·11	149,7	30·98	6·83	8,7	56·24	7·35	1900	
58,5	86·47	5·08	11,1	15·10	6·00	100,0	55·65	5·90	154,1	47·72	6·72	10,2	59·33	6·27	1901	
77,6	83·58	5·72	§	§	§	114,2	52·46	5·91	146,6	37·54	8·56	9,0	57·95	6·09	1902	
INTERMEDIATE CLASS PASSENGERS.																
...	...	...	...	...	...	...	...	...	103,6	90·67	3·74	...	...	...	1898	
...	...	...	...	...	...	...	...	...	86,7	60·75	3·70	...	...	...	1899	
...	...	...	...	...	...	...	...	...	‡	...	...	...	...	...	1900	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1901	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1902	
3RD OR LOWEST CLASS PASSENGERS.																
3,777,8	40·66	2·00	154,4	15·37	2·50	12,579,4	30·91	1·99	9,686,3	27·33	2·65	263,6	42·68	3·04	1898	
3,157,0	43·30	2·00	209,9	14·16	2·50	12,449,1	30·19	2·00	9,678,4	27·59	2·66	281,2	43·70	3·00	1899	
5,201,5	41·10	2·00	229,3	13·90	2·50	13,002,8	32·89	2·00	10,576,4	27·75	3·01	282,9	43·15	3·00	1900	
5,836,1	40·06	2·03	237,6	13·69	2·50	13,591,8	33·69	2·05	11,376,0	26·10	3·04	290,6	46·64	2·84	1901	
6,282,0	39·70	2·10	§	§	§	14,911,7	33·42	2·05	11,882,9	26·49	2·99	232,8	48·21	3·00	1902	
SEASON AND VENDORS' TICKETS.																
3,9	...	...	...	...	...	202,4	...	...	73,3	...	...	...	...	...	1898	
10,0	...	...	...	...	...	196,8	...	...	103,5	...	...	...	...	...	1899	
13,7	...	...	...	...	...	201,1	...	...	96,9	...	...	...	...	...	1900	
17,0	19·04	1·07	...	...	...	323,2	15·29	0·58	95,2	6·82	3·00	...	...	...	1901	
18,8	17·45	1·04	§	§	§	341,0	16·13	0·54	110,4	6·41	2·98	...	...	...	1902	
TOTAL OF ALL CLASSES.																
3,845,7	41·53	2·18	164,0	15·35	2·76	12,897,5	31·09	2·07	10,056,5	28·03	2·83	275,9	43·17	3·33	1898	
3,252,5	44·21	2·21	221,9	14·16	2·76	12,756,2	30·37	2·09	10,054,6	27·90	2·82	292,3	44·10	3·27	1899	
5,390,4	41·75	2·15	243,5	13·98	2·78	13,371,8	33·10	2·07	10,845,8	27·31	3·16	293,2	43·57	3·25	1900	
5,927,4	40·62	2·16	250,5	13·79	2·76	14,035,1	33·47	2·11	11,650,6	26·31	3·20	302,6	47·13	3·05	1901	
6,397,0	40·34	2·24	§	§	§	15,387,3	33·25	2·12	12,165,5	26·52	3·16	243,3	48·65	3·21	1902	
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.																
1·49			9·01			1·07			1·27			2·16			1898	
1·45			5·18			0·94			1·29			2·28			1899	
1·27			8·01			0·92			1·29			1·92			1900	
1·50			7·08			0·82			1·41			2·14			1901	
1·41			§			0·83			1·48			2·23			1902	
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.																
0·69			—6·25			1·00			1·56			1·17			1898	
0·76			—3·42			1·13			1·53			0·99			1899	
0·87			—5·23			1·15			1·87			1·33			1900	
0·66			—1·02			1·29			1·79			0·91			1901	
0·83			§			1·29			1·68			0·82			1902	

Tuticorin raised to 2·50 pies per mile from the 1st November 1900. ‡ Intermediate class abolished. § Included with the Southern Mahratta railway.
1898 to 1900 are included under the several classes, as the information is not available separately.

P. T. O.

Appendix 14.
Number of Passengers.

APPEN

Number of passengers carried by each railway, and average

(Referred to in paragraph

GAUGE.	2' 6" GAUGE—*concluded.*											
CALSS: No.	25			26			27			28		
Railway.	BARSI.			TARAKESHWAR-MAGRA.			RANAGHAT-KRISHNAGAR.			TEZPUR-BALIPARA.		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1ST CLASS PASSENGERS.												
1898	...	...	...	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...	...	...	...
1900	...	...	...	...	...	...	...	3	...	...	...	...
1901	...	...	...	2	3'77	21'96	...	...	...	2,5	...	...
1902	...	...	...	4	...	...	...	...	...	2,3	...	...
2ND CLASS PASSENGERS.												
1898	* 8	23'21	14'85	...	...	...	...	...	...	...	...	...
1899	7	21'35	23'56	...	...	...	...	...	...	...	...	...
1900	7	21'37	22'02	...	...	...	...	...	...	...	...	...
1901	5	21'92	23'57	8	8'20	10'55	...	...	...	...	...	...
1902	7	20'95	22'88	9	...	...	...	...	...	...	...	...
INTERMEDIATE CLASS PASSENGERS.												
1898	...	...	...	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...	...	...	...
1900	...	...	...	...	...	...	11,7	...	...	...	...	...
1901	...	...	...	8,6	7'74	4'44	...	...	...	7	...	...
1902	...	...	...	11,0	...	...	...	...	...	3,1	...	...
3RD OR LOWEST CLASS PASSENGERS.												
1898	† 49,7	19'44	3'00	‡371,1	...	...	...	...	...	‡118,5	...	...
1899	54,0	20'48	3'00	‡326,3	...	...	‡156,5	...	...	‡136,8	...	...
1900	64,5	20'65	3'00	‡393,1	...	...	226,2	...	...	‡144,9	...	...
1901	76,8	20'70	3'00	401,4	9'92	3'07	‡226,1	...	...	103,8	...	...
1902	71,1	20'12	3'00	403,6	...	...	‡240,7	...	...	111,0	...	...
SEASON AND VENDORS' TICKETS.												
1898	...	...	...	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...	...	...	...
1900	...	...	...	...	...	...	...	...	...	...	...	...
1901	...	...	...	8,6	9'00	4'25	...	...	...	9,0	...	...
1902	...	...	...	12,6	...	...	...	...	...	9,0	...	...
TOTAL OF ALL CLASSES.												
1898	50,5	19'50	3'22	371,1	...	...	156,5	...	...	118,5	...	...
1899	54,7	20'49	3'26	326,3	...	...	156,5	...	...	136,8	...	...
1900	65,2	20'66	3'21	393,1	...	...	238,2	...	...	144,9	...	...
1901	77,3	20'71	3'14	419,0	9'86	3'22	226,1	...	...	116,0	...	...
1902	71,8	20'12	3'19	428,5	...	...	240,7	...	...	125,4	...	...
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.												
1898	5'93											
1899	2'97											
1900	3'02											
1901	2'59											
1902	...											
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.												
1898	2'71											
1899	0'29											
1900	0'19											
1901	0'55											
1902	...											

* Upper class. † Lower class. ‡ Total shown under 3rd or lowest class, as details by classes are not available.

DIX 14—*concluded.*

distance travelled by, and average rate charged to, each passenger.

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2′ 0″ GAUGE.												Totals.	Gauge.
29			30			31			32				Class: No.
Darjeeling-Himalayan.			Howrah-Amta.			Howrah-Sheakhala.			Jorhat.				Railway.
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.		Calendar year.
1ST CLASS PASSENGERS.													
4,2	42·40	60·18	...	...	...	...	...	...	...	...	...	610,9	1898
4,1	42·02	56·48	7	...	...	9	...	...	...	...	...	526,2	1899
4,7	41·58	55·22	6	...	...	5	...	...	...	...	...	521,1	1900
4,4	47·43	54·07	4	...	...	4	...	...	...	...	...	532,4	1901
5,2	43·91	55·05	...	...	...	...	...	...	...	...	24·00	562,6	1902
2ND CLASS PASSENGERS.													
12,6	40·10	29·74	...	...	...	...	...	...	...	...	...	2,253,2	1898
11,8	39·68	28·53	...	...	...	...	...	...	...	...	...	2,352,1	1899
10,8	38·68	29·40	...	...	...	...	...	...	...	...	...	2,284,7	1900
13,1	37·59	33·18	...	...	...	...	...	...	...	...	...	2,404,8	1901
13,7	38·27	29·73	...	...	...	...	...	...	...	...	...	2,530,5	1902
INTERMEDIATE CLASS PASSENGERS.													
...	...	...	...	...	...	...	...	...	...	...	...	5,072,6	1898
...	...	...	24,0	...	...	13,0	...	...	...	...	...	5,232,6	1899
...	...	...	28,4	...	...	14,0	...	...	...	...	...	5,703,3	1900
...	...	...	28,0	...	...	12,2	...	...	...	...	...	6,669,6	1901
...	...	...	...	...	...	...	...	...	...	...	8·00	6,813,2	1902
3RD OR LOWEST CLASS PASSENGERS.													
44,4	27·81	14·23	604,9	...	...	271,0	...	...	58,3	...	...	1,31,512,3	1898
44,8	27·80	13·04	737,5	...	...	275,8	...	...	62,0	...	...	1,40,321,1	1899
49,1	26·96	14·52	744,0	...	...	286,3	...	...	60,4	...	...	1,53,954,2	1900
56,4	28·02	13·23	‡762,4	...	...	‡302,3	...	...	76,1	...	...	1,76,415,8	1901
61,2	26·82	14·84	‡782,6	...	...	‡313,7	...	...	130,3	...	6·00	1,71,715,9	1902
SEASON AND VENDORS' TICKETS.													
...	...	...	...	...	...	...	...	...	...	...	...	12,116,7	1898
...	...	...	...	...	...	...	...	...	...	...	...	13,287,7	1899
...	...	...	...	...	...	...	...	...	...	...	...	13,844,6	1900
...	...	...	...	...	...	...	...	...	...	...	...	14,725,2	1901
...	...	...	...	...	...	...	...	...	...	...	...	15,020,6	1902
TOTAL OF ALL CLASSES.													
61,2	31·34	22·56	629,6	...	...	283,9	...	...	58,3	...	...	1,51,565,7	1898
60,7	31·14	20·88	766,5	...	...	290,3	...	...	62,0	...	...	1,61,719,7	1899
64,6	29·99	21·84	772,4	...	...	298,9	...	...	60,4	...	...	1,76,307,9	1900
73,9	30·87	21·27	762,4	...	...	302,3	...	...	76,1	...	...	1,94,748,3	1901
80,1	29·89	21·86	782,6	...	...	313,7	...	...	130,3	...	...	1,96,648,2	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.													
7·44			...			...			...			...	1898
7·56			...			...			...			...	1899
5·76			...			...			...			...	1900
7·02			...			...			...			...	1901
6·12			...			...			...			...	1902
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.													
15·12			...			...			...			...	1898
13·32			...			...			...			...	1899
17·08			...			...			...			...	1900
14·16			...			...			...			...	1901
15·72			...			...			...			...	1902

Appendix 15.
Passenger earnings.

Gross earnings in thousands *of rupees from*

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to

GAUGE.	5′ 6″ GAUGE.																		
CLASS: No.	1	2		3	4		5	6	7		8		9		10		12	13	14
		E. B. SYSTEM.							G. I. P. SYSTEM.		B. B. & C. I. SYSTEM.		N. G. S. SYSTEM.		M. SYSTEM.				
Calendar year.	E. I.	5′ 6″ gauge. (*a*)	Other gauges. (*b*) to (*e*).	B. C.	B. N. (*a*) and (*b*).	E. C.	O. & R. (*a*) to (*c*)	N. W. (*a*) to (*h*).	G. I. P. (*a*) to (*c*).	I. M. (*d*) to (*h*).	B. B. & C. I. (*a*) to (*e*) & (*l*) & (*m*).	R. M. (*f*) to (*k*)	N. G. S. (*a*) & (*b*).	H. G. V. (*c*).	M. (*a*) to (*c*).	S.C. & N. (*d*) (*e*).	B. D.	D. S.	A. B.
1ST CLASS PASSENGERS.																			
1898	6,92	95	65	6	44	30	1,20	4,26	5,17	1,22	1,26	1,28	52	...	1,99	...	2	9	17
1899	6,86	1,06	56	7	53	52	1,22	3,77	5,51	1,30	1,41	1,33	52	...	1,98	11	2	11	18
1900	6,75	1,07	58	7	71	74	1,52	3,64	5,27	1,18	1,36	1,20	46	9	1,98	28	2	10	20
1901	6,40	1,00	60	6	1,21	‖	1,55	3,84	5,22	1,26	1,46	1,32	40	21	2,53	27	2	9	21
1902	7,96	1,12	64	7	1,57	‖	1,83	4,21	6,19	1,75	1,57	1,71	47	24	2,94	31	2	9	24
2ND CLASS PASSENGERS.																			
1898	8,42	1,16	89	26	42	36	1,69	6,01	7,53	1,77	3,45	2,22	73	...	2,50	...	3	4	15
1899	8,56	1,18	87	23	62	64	1,66	4,78	8,14	1,72	4,55	2,22	76	1	2,80	9	3	4	19
1900	8,89	1,18	87	22	85	74	2,18	4,57	7,45	1,55	4,38	2,03	69	20	2,77	22	3	4	20
1901	8,77	1,26	97	23	1,75	‖	2,43	5,21	8,71	1,91	4,56	2,47	74	49	3,44	27	3	4	23
1902	9,24	1,34	93	21	1,72	‖	2,82	5,62	10,35	2,28	4,54	2,51	78	55	3,71	34	3	4	25
INTERMEDIATE CLASS PASSENGERS.																			
1898	12,92	2,98	1,54	35	26	10	2,88	7,45	5,57	4,72	5,07	2,43	1,16	...	...	...	1	...	...
1899	13,10	3,00	1,42	34	37	19	2,67	8,00	6,52	4,05	6,61	2,77	1,17	...	...	...	1	...	...
1900	14,28	2,84	1,61	35	52	34	3,10	9,39	7,73	3,77	6,77	2,92	1,14	...	...	...	1	...	†
1901	15,37	3,10	1,77	42	1,86	‖	3,62	11,64	8,78	4,05	7,24	3,18	1,25	...	42	...	1	...	6
1902	16,09	3,29	1,87	44	1,84	‖	4,34	11,99	9,77	4,14	7,10	3,03	1,31	...	48	...	2	...	7
3RD CLASS PASSENGERS.																			
1898	1,38,58	19,33	17,03	5,27	10,90	12,48	31,12	90,47	34,81	12,98	19,02	51,65	4,77	...	30,22	...	37	98	6,51
1899	1,42,73	20,55	18,08	5,48	17,91	18,57	32,93	94,26	41,71	14,04	27,59	54,73	4,96	8	25,14	19	40	1,01	8,20
1900	1,53,63	20,86	22,08	5,78	28,36	22,22	36,04	1,00,51	45,31	15,06	32,65	52,55	5,34	2,88	30,25	34	52	1,15	8,67
1901	1,64,82	21,21	22,02	6,24	49,08	‖	43,89	1,09,35	56,87	17,82	34,69	64,56	5,54	6,44	47,17	40	77	1,04	10,31
1902	1,54,46	21,90	23,31	6,27	48,80	‖	41,46	1,14,83	57,13	18,53	35,26	56,99	5,51	6,62	50,06	1,27	89	1,09	9,90
SEASON AND VENDORS' TICKETS OF ALL CLASSES.																			
1898	1,25	1,04	5	17	3	1	...	...	1,56	...	2,61	1	4	...	20	...	...	...	...
1899	1,29	1,10	5	17	3	...	...	...	1,71	...	3,08	2	14	...	22	...	...	...	...
1900	1,39	1,08	5	17	2	2	...	...	1,85	...	3,14	2	20	...	27	...	...	...	...
1901	1,55	1,59	6	17	8	‖	...	...	1,84	...	3,23	2	13	8	26	...	...	...	...
1902	1,59	1,55	6	18	13	‖	...	...	2,08	...	3,38	1	10	6	30	...	...	...	...
TOTAL PASSENGER TRAFFIC.																			
1898	1,68,09	25,46	20,16	6,11	12,05	13,19	36,89	1,08,19	54,64	20,19	31,41	57,59	7,22	...	34,91	...	43	1,11	6,83
1899	1,72,54	26,89	20,98	6,29	19,46	19,92	38,48	1,10,81	63,59	21,11	43,24	61,07	7,55	9	30,14	39	46	1,16	8,57
1900	1,84,94	27,03	25,19	6,59	30,46	24,06	42,84	1,18,11	67,61	21,56	48,30	58,72	7,83	3,17	35,27	84	58	1,29	9,08
1901	1,96,91	28,16	25,42	7,12	53,98	‖	51,49	1,30,01	81,42	25,04	51,18	68,55	8,06	7,22	53,82	94	83	1,17	10,81
1902	1,89,27	29,20	26,81	7,17	54,06	‖	50,45	1,36,65	85,52	26,70	51,85	64,25	8,17	7,47	57,49	192	96	1,22	10,46

* Upper class.
† Intermediate class introduced on this railway from the 1st October 1900.
‡ Intermediate class abolished on this railway from the 1st November 1899.
§ Lower class.
‖ Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
** Included with the Southern Mahratta railway.

DIX 15.

Appendix 15.
Passenger earnings.

Passenger traffic of each railway (by systems).

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the code letters used to denote railway systems.

3′ 3⅜″ GAUGE.											2′ 6″ GAUGE.					2′ 0″ GAUGE.					GAUGE.
15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32		CLASS: No.
D.	B. & N. W.	R. & K. system.		J. B.	U. C.	B. G. J. P.	S. M.	W. I. P.	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Totals.	Calendar year.
		R. & K. (a) & (b)	P.L. (c)																		
1ST CLASS PASSENGERS.																					
...	52	35	...	12	2	24	96	2	82	1,01	10	...	...	...	...	56	1	1	...	34,24	1898
...	51	33	...	9	3	21	82	2	77	1,06	8	...	...	...	...	52	1	1	...	31,52	1899
...	46	32	...	7	3	18	94	2	81	1,14	7	...	...	...	...	56	1	...	...	31,83	1900
...	51	40	...	20	3	19	91	2	88	1,32	7	...	...	...	...	59	1	...	...	32,78	1901
...	57	40	...	22	3	15	1,16	**	1,04	1,36	6	...	...	...	...	65	...	...	...	38,57	1902
2ND CLASS PASSENGERS.																					
...	42	61	...	15	4	68	1,14	4	1,58	2,06	20	* 1	...	...	...	78	...	...	...	45,28	1898
...	42	59	...	15	3	74	1,46	5	1,52	2,01	19	2	...	...	...	70	...	...	...	46,97	1899
...	42	56	...	15	3	59	1,52	6	1,53	2,31	19	2	...	...	...	64	...	...	...	47,08	1900
...	51	65	...	42	3	58	1,33	3	1,71	2,58	20	1	...	...	...	85	...	...	...	52,43	1901
...	57	73	1	44	4	52	1,73	**	1,84	2,45	17	2	...	...	...	81	...	...	...	56,59	1902
INTERMEDIATE CLASS PASSENGERS.																					
...	42	9	...	...	2	...	...	...	...	1,88	...	...	...	...	...	...	10	4	...	49,49	1898
...	45	10	...	...	2	12	...	...	...	1,01	...	...	...	...	...	...	12	4	...	52,08	1899
...	55	10	...	...	2	39	...	...	...	†	...	...	...	4	...	...	21	4	...	56,03	1900
...	78	12	...	...	2	44	...	...	...	...	...	...	1	9	...	...	12	4	...	64,39	1901
...	92	13	...	...	2	46	...	**	...	...	...	...	2	10	...	...	13	5	...	67,60	1902
3RD CLASS PASSENGERS.																					
26	21,67	4,19	...	4,31	77	7,65	16,01	31	40,88	36,71	1,76	§ 15	67	...	32	91	1,72	62	12	6,25,52	1898
29	24,46	4,42	...	4,93	83	8,90	14,27	39	39,55	36,84	1,92	17	59	45	37	85	2,26	64	12	6,70,81	1899
30	28,01	4,59	...	4,34	74	8,11	22,69	41	45,25	45,18	1,91	21	67	61	39	1,00	2,27	66	12	7,51,66	1900
42	36,14	5,76	36	7,79	87	8,59	24,77	43	48,96	47,03	2,00	25	66	56	27	1,09	2,25	68	15	8,48,25	1901
26	40,46	5,76	40	7,90	86	7,41	27,24	**	53,32	49,16	1,75	22	66	60	29	1,27	2,28	69	22	8,54,97	1902
SEASON AND VENDORS' TICKETS OF ALL CLASSES.																					
...	1	...	...	...	...	...	1	...	9	7	...	...	...	...	...	...	...	...	...	7,15	1898
...	1	...	...	...	...	...	1	...	9	9	...	...	...	...	...	...	...	...	...	8,01	1899
...	1	...	...	...	...	1	1	...	14	9	...	...	...	...	...	...	...	...	...	8,47	1900
...	1	...	...	...	...	1	2	...	15	10	...	...	2	...	...	...	...	...	...	9,32	1901
...	1	...	...	...	...	...	2	**	15	11	...	...	2	...	...	...	...	...	...	9,75	1902
TOTAL PASSENGER TRAFFIC.																					
26	23,04	3,24	...	4,58	85	8,57	18,12	37	43,37	41,73	2,06	16	67	...	32	2,25	1,83	67	12	7,58,68	1898
29	25,85	5,44	...	5,17	91	9,97	16,56	46	41,93	41,01	2,19	19	59	45	37	2,07	2,39	69	12	8,09,39	1899
30	29,45	5,57	...	4,56	82	9,28	25,16	49	47,73	48,72	2,17	23	67	65	39	2,20	2,39	70	12	8,95,07	1900
42	37,95	6,93	36	8,41	95	9,81	27,03	50	51,70	51,03	2,27	26	69	65	27	2,53	2,38	72	15	10,07,17	1901
26	42,53	7,02	41	8,56	95	8,54	30,15	**	56,35	53,08	1,98	24	70	70	29	2,73	2,41	74	22	10,27,48	1902

Appendix 16.
Goods traffic.

Goods of the different classes in thousands *of tons carried by each railway*

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

Gauge.	5′ 6″									
Class: No.	1	2				3		4	
		E. B. SYSTEM.						BENGAL-NAGPUR SYSTEM.	
Calendar year.	East Indian.	5′ 6″ Gauge (*a*).		Other gauges. (*b*) to (*e*).		Bengal Central.		Bengal-Nagpur. (*a*) & (*b*).	
	Tons.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
GENERAL MERCHANDISE.									
1898	3,416	1,068	9·17	555	8·95	76	7·44	530	7·72
1899	3,836	1,115	8·87	619	10·56	104	6·95	671	6·73
1900	3,858	1,230	8·93	783	10·70	159	7·05	898	4·89
1901	3,656	1,114	9·59	747	*10·66	125	8·12	889	7·01
1902	3,810	1,228	9·12	820	10·44	112	8·28	993	6·92
MILITARY STORES.									
1898	24	...	22·36	...	17·91	...	125·02	...	13·19
1899	10	...	25·05	...	24·11	...	126·76	...	18·71
1900	11	...	24·69	...	...	...	132·78	1	13·16
1901	6	...	26·05	...	...	1	131·41	...	13·57
1902	11	...	21·99	...	22·45	2	135·25	...	18·60
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.									
1898	3,745	220	4·48	...	...	20	4·33	708	3·61
1899	3,898	206	4·60	...	...	20	5·48	652	3·57
1900	4,658	244	2·54	25	5·31	24	3·50	754	3·64
1901	5,294	277	4·65	17	*4·57	29	3·85	805	3·65
1902	5,042	276	4·82	25	4·99	25	3·96	906	3·16
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.									
1898	1,124	225	2·45	...	...	32	2·45	211	2·70
1899	1,278	242	2·45	...	...	16	2·45	528	2·04
1900	1,388	207	2·44	163	2·48	23	2·41	315	2·38
1901	1,456	224	2·45	23‡	*2·45	23	2·45	524	2·52
1902	1,615	295	2·45	294	2·52	21	2·45	975	2·45
TOTAL GOODS.†									
1898	8,325	3,513	7·98	648	9·22	128	6·14	1,450	6·23
1899	9,049	1,564	7·75	747	9·02	140	6·72	1,852	5·34
1900	10,053	1,682	7·93	971	8·90	206	6·33	1,970	4·58
1901	10,418	1,616	8·26	998	*8·97	178	7·09	2,212	5·45
1902	10,484	1,800	7·86	1,049	8·71	159	7·46	2,880	4·82
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.									
1898	207·74	86·28		166·51		62·02		102·07	
1899	204·74	87·24		106·36		69·09		123·45	
1900	209·32	86·58		94·76		77·36		194·79	
1901	206·30	81·29		*97·14		68·85		105·10	
1902	194·62	87·18		91·52		68·57		106·52	
AVERAGE COST OF CARRYING PER TON PER MILE.									
	Pies.	Pies.		Pies.		Pies.		Pies.	
1898	1·56	3·11		4·20		5·52		3·11	
1899	1·60	3·87		3·96		4·92		2·60	
1900	1·71	3·66		3·76		4·62		2·20	
1901	1·65	3·86		4·48		4·76		3·33	
1902	1·73	3·43		4·44		5·31		2·72	
AVERAGE PROFIT PER TON PER MILE.									
	Pies.	Pies.		Pies.		Pies.		Pies.	
1898	3·06	4·77		4·99		0·63		3·07	
1899	3·03	3·70		4·98		1·49		2·77	
1900	2·87	4·04		5·04		1·66		2·38	
1901	2·74	4·48		4·56		2·31		2·14	
1902	2·73	4·49		4·36		2·17		2·12	

NOTE.—The blanks shown in the "tons" columns
* Excluding the Cooch
† Including live-stock and
§ Including the Gwalior Light railway
Transferred partly to the Bengal-Nagpur railway
** Excluding the Nowshera-

DIX 16.

(by systems), average rate charged per ton in pies, and average distance carried.

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to the code letters used to denote railway systems.

5' 6"										Gauge.
		5		6		7				Class : No.
East Coast.		Oudh and Rohilekhand.		N. W. System. North Western. (*a*) to (*h*).		G. I. P. System. Great Indian Peninsula. (*a*) to (*c*).		G. I. P. System. Indian Midland. (*d*) to (*h*). §		Calendar year.
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	
GENERAL MERCHANDISE.										
355	5·08	1,048	6·15	2,749	5·38	2,056	8·05	480	6·60	1898
527	5·07	1,171	5·95	2,879	5·56	2,279	7·70	573	6·95	1899
762	4·21	1,139	6·20	4,526	5·82	2,322	7·50	872	6·61	1900
‖	‖	1,287	5·77	3,431	5·28	2,517	7·74	783	6·35	1901
‖	‖	1,348	5·67	3,157	5·49	2,577	6·14	872	6·31	1902
MILITARY STORES.										
...	20·54	4	12·86	64	13·99	8	20·50	4	8·15	1898
...	18·40	3	16·57	22	18·30	9	19·07	2	14·99	1899
...	18·89	4	15·11	22	16·08	7	21·29	1	16·22	1900
‖	‖	3	17·46	28	15·85	8	19·74	1	16·32	1901
‖	‖	8	15·67	36	16·72	21	22·80	13	15·05	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.										
6	4·43	24	4·05	43	3·64	229	3·12	3	3·52	1898
98	3·60	30	3·82	34	3·26	138	3·45	11	3·03	1899
160	3·22	32	3·88	26	3·50	138	3·06	6	3·05	1900
‖	‖	34	3·74	35	3·86	146	3·53	13	2·92	1901
‖	‖	48	3·33	42	4·43	148	3·51	15	3·11	1902
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.										
136	2·41	568	2·75	1,983	2·52	542	2·10	282	2·60	1898
227	2·45	771	2·69	2,120	2·47	558	2·04	413	2·68	1899
280	2·41	628	2·61	1,775	2·44	320	2·00	332	2·48	1900*
‖	‖	574	2·61	2,105	2·44	513	2·00	512	2·63	1901
‖	‖	898	2·80	2,693	2·51	525	2·39	448	2·42	1902
TOTAL GOODS.†										
498	4·39	1,615	5·71	4,933	5·26	2,846	7·07	770	6·07	1898
852	4·23	1,975	5·46	5,070	5·24	2,997	6·99	1,001	6·29	1899
1,203	3·80	1,803	5·62	5,051	5·42	3,012	6·76	1,216	6·25	1900
‖	‖	1,899	5·29	5,604	5·02	3,213	2·22	1,309	5·72	1901
‖	‖	2,302	5·06	5,934	5·16	3,278	5·46	1,349	5·67	1902
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.										
103·35		103·13		195·33		261·90		172·22		1898
109·38		103·03		173·74		249·41		157·73		1899
134·75		105·53		137·66		238·15		214·25		1900
‖		126·09		199·57		257·50		176·97		1901
‖		106·23		180·74		308·42		188·48		1902
AVERAGE COST OF CARRYING PER TON PER MILE.										
Pies.		Pies.		Pies.		Pies.		Pies.		
4·20		3·06		2·88		3·57		3·66		1898
3·34		2·66		2·98		3·42		3·62		1899
2·66		2·97		3·30		3·22		2·79		1900
‖		2·52		** 2·64		3·05				1901
‖		2·74		3·13		2·78				1902
AVERAGE PROFIT PER TON PER MILE.										
Pies.		Pies.		Pies.		Pies.		Pies.		
0·38		2·63		2·40		3·48		2·53		1898
0·39		2·84		2·27		3·52		2·70		1899
1·14		2·65		2·12		3·54		3·46		1900
‖		2·79		** 2·37		3·88				1901
‖		2·34		2·09		3·09				1902

denote that less than 1,000 tons were carried during the year.
Behar State railway.
other miscellaneous goods traffic.
in the case of tonnage only, which is shown under "General merchandise" "Total goods", as details are not furnished.
and partly to the Madras railway from the 1st January 1901.
Durgai railway.

Appendix 16.
Goods traffic.

Goods of the different classes in thousands *of tons carried by each railway*

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

Gauge.	5′ 6″													
Class: No.	8				9				10				12	
	B. B. & C. I. System.				N. G. S. System.				Madras System.					
Calendar year.	Bombay, Baroda and Central India. (*a*) to (*e*) & (*l*) & (*m*).		Rajputana-Malwa. (*f*) to (*k*).		Nizam's Guaranteed State. (*a*) and (*b*).		Hyderabad-Godavari Valley. (*c*).		Madras. (*a*) to (*c*).		S. C. & N. (*d*) & (*e*).		Bengal-Dooars.	
	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
General Merchandise.														
1898	1,558	7·95	1,974	6·97	269	9·10	...	...	786	9·41	...	...	25	61·63
1899	1,680	8·60	2,283	7·17	297	8·11	9	11·68	852	9·33	3	105·52	26	57·67
1900	1,882	8·11	2,485	6·60	351	8·02	99	10·75	832	9·52	9	70·33	47	59·94
1901	1,509	7·87	2,014	6·42	307	8·81	132	11·04	1,524	6·88	15	80·63	69	24·82
1902	1,516	8·72	1,885	6·77	321	8·76	149	10·45	1,441	7·24	33	34·16	75	22·80
Military Stores.														
1898	...	20·08	6	15·63	1	23·33	...	...	2	27·88	...	...	...	...
1899	1	16·60	7	18·77	1	18·99	...	...	2	28·11	...	127·46	...	...
1900	1	19·83	6	16·95	1	24·01	...	...	2	25·56	...	121·79	...	18·46
1901	1	15·46	3	19·01	1	24·58	...	24·61	3	22·49	1	129·15	...	...
1902	1	19·71	6	19·78	...	30·98	...	16·69	4	19·76	2	141·00	...	...
Coal and Coke for the Public and for Foreign Railways.														
1898	49	3·11	21	4·78	343	3·44	...	...	171	4·79	1	...	1	28·25
1899	68	2·83	15	4·41	326	3·74	...	5·36	189	4·69	...	...	2	29·39
1900	96	2·76	17	4·82	448	3·72	2	4·93	200	4·69	...	...	6	27·67
1901 ¶	70	2·87	15	4·50	372	3·97	3	4·02	542	4·10	...	...	4	12·31
1902	42	2·88	18	4·80	390	3·99	5	3·92	494	4·16	...	57·54	9	8·26
Revenue Stores including Coal and Material for Construction.														
1898	372	2·99	251	2·79	184	3·16	...	...	214	4·17	...	...	77	2·41
1899	475	3·01	329	2·83	251	3·06	3	3·32	276	4·08	1	30·10	11	8·80
1900	424	2·56	309	2·74	241	3·20	199	4·65	231	4·14	...	78·66	8	4·44
1901	374	2·90	348	2·80	240	3·53	392	4·98	341	2·72	...	96·63	5	4·19
1902	352	2·56	316	2·75	223	3·45	432	4·52	378	2·56	5	2·15	7	3·21
Total Goods.*														
1898	2,004	7·46	2,259	6·75	797	5·14	...	...	1,174	8·35	...	...	103	30·85
1899	2,256	7·76	2,640	6·89	875	5·42	12	10·45	1,321	8·32	4	93·50	39	45·69
1900	2,436	7·34	2,914	6·46	1,012	5·57	301	8·68	1,509	8·41	10	71·86	63	39·14
1901	1,973	7·18	2,393	6·21	920	5·89	527	9·47	2,413	6·10	16	83·17	78	23·22
1902	1,927	7·96	2,230	6·48	935	5·93	587	9·06	2,319	6·22	40	33·68	91	19·53
Average Distance in Miles Goods were Carried.														
1898	152·31		199·74		147·34		...		130·38		...		11·85	
1899	140·66		204·21		138·39		80·93		120·72		16·88		21·49	
1900	141·86		240·68		145·03		47·93		124·86		16·57		19·38	
1901	146·68		261·70		116·32		41·56		126·92		16·09		35·88	
1902	133·69		247·10		122·26		45·88		125·67		28·12		38·62	
Average Cost of Carrying per Ton per Mile.		Pies. †		Pies. ‡		Pies.		Pies.		Pies.		Pies.		Pies.
1898		3·22		3·01		2·16		...		4·31		...		
1899		3·49		2·98		2·11		3·75		4·52		81·68		
1900		3·80		3·03		2·32		5·08		4·65		38·72		§
1901		2·99		3·02		2·01		4·50		3·41		35·21		
1902		3·44		3·16		2·24		4·64		3·69		34·17		
Average Profit per Ton per Mile.		Pies. †		Pies. ‡		Pies.		Pies.		Pies.		Pies.		Pies.
1898		4·31		3·66		2·98		...		4·03		...		
1899		4·28		3·86		3·31		6·70		3·79		11·82		
1900		3·54		3·43		3·25		3·60		3·76		33·14		§
1901		4·24		3·13		3·89		5·02		2·69		47·96		
1902		4·51		3·27		3·75		4·46		2·55		11·69		

NOTE.—The blanks shown in "tons" columns
* Including live-stock and
† Including the Godhra-Rutlam-Nagda ; but excluding
‡ Excluding the Godhra-Rutlam-
§ Information
¶ The decrease is due to ballast train tonnage being credited

DIX 16—*continued.*

(by systems), average rate charged per ton in pies, and average distance carried.

27, 29, 30 and 31 of Report.)

to the code letters used to denote railway systems.

3′ 3⅜″														Gauge.
13		14		15		16		17				18		Class : No.
Dibru-Sadiya.		Assam-Bengal.		Deoghur.		Bengal and North-Western.		Rohilkund and Kumaon. (*a*) & (*b*).		Powayan Light. (*c*).		Jodhpur-Bikaner.		Calendar year.
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	
GENERAL MERCHANDISE.														
58	34·74	69	8·49	13	17·35	751	5·92	269	7·30	...	...	153	10·26	1898
63	31·93	95	8·74	13	13·08	985	5·88	335	6·91	...	...	297	9·42	1899
77	33·46	110	8·64	12	12·99	945	6·20	316	6·87	...	...	283	8·28	1900
73	37·46	166	6·55	13	§	1,024	6·06	333	7·54	12	...	297	8·23	1901
64	35·31	149	6·82	8	13	1,081	6·63	370	6·91	22	§	287	8·52	1902
MILITARY STORES.														
...	...	...	19·94	...	...	...	6·41	1	19·01	...	...	...	32·85	1898
...	...	...	22·61	...	...	...	2·88	...	20·74	...	...	...	31·77	1899
...	...	...	23·29	...	...	...	24·23	...	23·54	...	...	...	30·37	1900
...	...	...	18·22	...	...	...	...	1	14·62	2	...	...	17·73	1901
...	...	...	22·91	...	...	...	7·13	1	19·94	§	§	...	17·88	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.														
384	5·55	6	4·06	...	...	35	3·67	...	4·12	...	...	...	9·67	1898
441	6·06	9	4·14	...	...	44	3·81	1	2·94	...	...	3	6·20	1899
442	6·29	11	3·78	...	...	44	4·10	1	3·37	...	...	10	5·63	1900
496	5·57	13	4·18	...	...	43	4·15	1	3·47	...	...	13	4·23	1901
441	5·59	13	3·89	2	13	58	4·23	...	3·72	§	§	11	4·38	1902
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.														
4	2·81	395	2·45	...	...	139	2·84	45	2·45	...	...	33	4·58	1898
5	4·66	368	1·61	...	...	271	2·47	36	2·45	...	...	45	2·75	1899
4	4·85	256	1·67	...	...	258	2·62	37	2·89	...	...	58	2·86	1900
8	3·67	¶60	2·53	...	...	303	2·48	38	2·45	3	...	92	3·46	1901
5	2·87	164	2·81	...	...	321	2·45	60	2·45	2	§	157	3·48	1902
TOTAL GOODS.*														
446	8·96	461	4·46	13	16·94	929	5·55	345	6·95	...	...	189	9·53	1898
509	8·52	472	3·67	13	13·08	1,307	5·30	372	6·72	...	...	349	8·80	1899
494	9·31	384	4·20	12	12·65	1,247	5·64	354	6·64	...	...	386	7·29	1900
577	8·69	¶239	5·49	13	§	1,370	4·83	373	7·17	17	...	403	7·42	1901
510	9·12	326	5·29	10	§	1,460	5·85	432	6·52	24	§	456	7·47	1902
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.														
55·21		50·07		4·79		121·03		63·85		...		87·11		1898
56·79		71·83		4·79		114·73		69·05		...		93·81		1899
54·68		79·99		4·79		109·33		69·39		...		86·26		1900
54·80		127·44		4·79		136·79		65·27		...		80·00		1901
54·80		87·08		§		119·63		66·30		§		82·00		1902
AVERAGE COST OF CARRYING PER TON PER MILE.														
Pies.		Pies.		Pies		Pies.		Pies.		Pies.		Pies.		
		6·38				2·41		4·07		...		3·54		1898
§		4·92		§		2·51		3·32		...		3·09		1899
		5·16				2·86		3·42		...		2·82		1900
...		5·49		2·90		2·48		3·88		...		4·12		1901
§		5·91		§		2·69		3·61		§		3·74		1902
AVERAGE PROFIT PER TON PER MILE.														
Pies.		Pies.		Pies.		Pies.		Pies.		Pies.		Pies.		
		—1·94				3·12		2·93		...		6·24		1898
§		—1·26		§		2·77		3·36		...		5·60		1899
		—0·06				2·75		3·17		...		5·58		1900
...		0·05		1·18		3·01		3·24		...		3·32		1901
§		—0·52		§		3·13		2·86		§		3·64		1902

note that less than 1,000 tons were carried during the year.
ner miscellaneous goods traffic.
r Gaekwar's Dabhoi and Rajpipla (2′ 6″ gauge) railways.
gda railway.
t available.
railway materials for construction in previous years.

Appendix 16.
Goods traffic.

APPEN

Goods of the different classes **in thousands** *of tons carried by each railway*

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

Gauge.	3′ 3⅜″													
Class : No.	19		20		21				22		23		24	
Calendar year.	Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Mahratta.		West of India Portuguese.		South Indian.		Burma.		Morvi.	
	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
GENERAL MERCHANDISE.														
1898	11	19·41	253	13·00	794	7·18	44	11·95	861	9·53	837	7·89	31	14·93
1899	25	15·98	297	12·74	942	6·91	114	10·91	877	9·49	773	7·86	39	13·54
1900	54	15·01	338	12·20	841	6·98	59	12·42	852	9·48	986	7·92	48	10·50
1901	26	14·29	230	11·60	801	7·92	70	11·43	1,065	8·83	1,086	8·27	27	11·36
1902	25	14·34	232	11·90	860	7·69	§	§	1,094	8·09	1,166	8·03	19	11·22
MILITARY STORES.														
1898	...	35·86	...	30·63	1	25·83	...	51·20	...	15·76	1	15·58	...	29·70
1899	...	32·20	...	35·77	1	19·63	...	...	...	22·95	1	15·85	...	28·21
1900	...	33·15	...	28·17	1	19·76	...	...	...	22·96	1	16·55	...	23·52
1901	...	32·00	...	28·25	2	15·42	...	...	‡	26·02	1	13·91	...	20·41
1902	...	34·86	...	23·41	3	9·60	§	§	...	26·49	2	10·19	...	26·53
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.														
1898	...	...	3	6·08	4	3·37	...	...	13	5·15	...	8·17	...	7·94
1899	...	...	4	5·45	3	3·94	...	...	27	5·46	...	9·59	1	13·68
1900	...	9·24	3	5·48	2	3·81	...	27·87	17	5·67	...	7·49	1	10·02
1901	1	2·74	...	5·96	2	4·11	...	...	22	6·38	...	14·19	...	11·13
1902	1	2·72	...	4·64	4	3·59	§	§	15	5·67	...	7·28	...	13·43
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.														
1898	...	2·73	22	2·98	130	2·62	3	5·48	828	2·47	269	2·08	1	2·94
1899	1	2·72	14	4·26	148	2·60	4	5·14	614	2·50	313	2·14	1	3·22
1900	1	3·02	15	3·59	150	2·66	5	5·25	824	2·44	268	2·35	1	7·60
1901	1	3·53	15	2·00	161	2·61	4	3·71	591	2·46	383	2·36	2	4·61
1902	1	5·36	12	1·92	147	2·61	§	§	797	2·48	429	2·21	...	7·58
TOTAL GOODS.*														
1898	11	19·19	278	11·88	930	6·47	47	11·79	1,703	8·60	1,113	6·99	33	14·41
1899	26	15·69	316	12·23	1,094	6·23	118	10·83	1,519	8·74	1,092	6·60	41	13·30
1900	56	14·97	357	11·78	996	6·30	64	12·13	1,697	8·69	1,261	7·05	50	10·75
1901	28	13·60	245	10·86	967	6·89	74	10·96	1,683	8·23	1,475	7·02	29	11·14
1902	27	13·89	245	11·14	1,016	6·76	§	§	1,910	7·49	1,603	7·09	19	11·26
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.														
1898	46·55		58·18		155·91		41·04		51·15		109·85		55·50	
1899	51·19		55·10		152·70		51·51		60·73		114·52		58·41	
1900	52·11		58·75		170·98		43·53		62·19		123·34		62·07	
1901	57·91		56·98		140·10		45·52		65·89		116·03		60·81	
1902	57·41		49·79		156·57		§		65·22		112·42		63·04	
AVERAGE COST OF CARRYING PER TON PER MILE.														
1898	7·98		Pies. 7·06		Pies. 4·70		Pies. 17·22		Pies. 4·77		Pies. 4·84		Pies. 7·44	
1899	6·56		6·20		4·39		7·59		4·85		4·65		7·48	
1900	5·15		5·99		4·36		12·39		4·51		4·69		7·08	
1901	6·52		6·42		5·00		11·92		4·01		4·72		7·56	
1902	6·29		6·75		4·65		§		3·93		4·58		6·75	
AVERAGE PROFIT PER TON PER MILE.														
1898	11·38		Pies. 4·53		Pies. 1·77		Pies. —5·43		Pies. 3·82		Pies. 2·40		Pies. 6·97	
1899	8·76		6·02		1·84		3·24		3·89		1·96		5·82	
1900	9·37		5·64		1·94		—0·26		4·18		2·35		2·77	
1901	7·21		4·46		1·89		—1·72		4·26		2·27		3·58	
1902	7·50		4·40		2·14		§		3·60		2·54		4·51	

NOTE.—The blanks shown in "tons" columns

* Including live-stock

† Information is

‡ Total shown under "general merchandise"

§ Included with

DIX 16—*concluded.*

(by systems), average rate charged per ton in pies, and average distance carried.

27, 29, 30 and 31 of Report.)

to the code letters used to denote railway systems.

2′ 6″								2′ 0″								Total.	Gauge, Class: No. / Calendar year.
25		26		27		28		29		30		31		32			
Barsi.		Tarakeshwar-Magra.		Ranaghat-Krishnagar.		Tezpur-Balipara.		Darjeeling-Himalayan.		Howrah-Amta.		Howrah-Sheakhala.		Jorhat.			
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.		
GENERAL MERCHANDISE.																	
45	21·01	‡6	...	...	...	‡5	...	25	68·81	‡ 4	...	‡ 3	...	‡ 17	...	21,155	1898
56	20·38	‡6	...	...	...	‡9	...	26	65·01	7	...	3	...	21	...	23,902	1899
41	20·72	‡8	...	‡1	...	‡9	...	32	62·35	9	...	5	...	15	...	27,301	1900
54	21·99	8	20·88	...	...	7	...	29	64·48	14	...	4	...	12	...	25,458	1901
50	21·12	10	...	1	...	6	...	27	66·85	14	...	6	...	12	...	25,840	1902
MILITARY STORES.																	
...	24·86	...	...	...	...	...	...	...	88·38	...	...	...	...	...	...	116	1898
...	35·71	...	...	...	...	...	...	...	139·37	...	...	...	...	...	...	59	1899
...	34·01	...	...	...	...	...	...	...	120·78	...	...	...	...	...	...	58	1900
...	31·32	...	...	...	...	...	...	...	132·98	...	...	...	...	...	...	63	1901
...	41·57	...	...	...	...	...	...	...	143·56	...	...	...	...	...	...	100	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.																	
...	20·17	...	...	...	...	...	..	2	28·30	...	...	...	...	...	...	6,031	1898
...	...	...	...	...	...	...	...	1	46·45	...	...	...	...	...	...	6,221	1899
...	...	...	...	...	...	...	...	2	43·90	...	...	...	...	...	...	7,309	1900
...	11·91	...	...	...	...	1	...	1	38·95	...	...	...	...	...	...	8,249	1901
...	10·45	...	...	...	...	2	...	2	37·91	...	...	...	...	...	...	8,034	1902
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.																	
...	6·82	...	...	...	...	...	...	4	30·32	...	...	...	...	...	...	8,074	1898
...	4·85	...	...	...	...	...	...	5	33·40	...	...	...	...	...	...	9,330	1899
...	...	...	...	...	...	...	...	5	35·91	...	...	...	...	...	...	8,925	1900
...	4·85	1	6·00	...	...	..	...	1	36·61	...	...	...	...	...	...	9,528	1901
...	...	1	...	...	...	...	...	4	87·84	...	...	...	...	...	...	11,487	1902
TOTAL GOODS. *																	
45	20·92	6	...	...	...	5	...	31	64·54	4	...	3	...	17	...	35,642	1898
57	20·35	6	...	...	...	9	...	32	62·87	7	...	3	...	21	...	39,748	1899
41	20·72	8	...	1	...	9	...	38	60·63	9	...	5	...	15	...	42,396	1900
54	21·96	9	26·88	...	...	8	...	31	63·30	14	...	4	...	12	...	43,392	1901
50	21·11	11	...	‡	...	8	...	33	63·74	14	...	6	...	12	...	45,537	1902
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.																	
22·01		...		...		...		41·48		...		...		...			1898
22·27		...		...		...		40·78		...		...		...			1899
21·97		...		...		...		41·71		...		...		...			1900
22·00		13·49		...		...		41·65		...		...		...			1901
22·00		...		...		...		41·41		...		...		...			1902
AVERAGE COST OF CARRYING PER TON PER MILE.																	
} † {		Pies.		Pies.		Pies.		} † {	Pies.	Pies.		Pies.		Pies.			
		...		...		...				...		...		...		...	1898
		...		...		...				...		...		...		...	1899
		...		...		...				...		...		...		...	1900
		...		...		...				...		...		...		...	1901
		...		...		...			46·92	...		...		...		...	1902
AVERAGE PROFIT PER TON PER MILE.																	
} † {		Pies.		Pies.		Pies.		} † {	Pies.	Pies.		Pies.		Pies.			
		...		...		...				...		...		...		...	1898
		...		...		...				...		...		...		...	1899
		...		...		...				...		...		...		...	1900
		...		...		...				...		...		...		...	1901
		...		...		...			16·20	...		...		...		...	1902

denote that less than 1,000 tons were carried during the year.
and other miscellaneous goods traffic.
not available.
details are not furnished.
the Southern Mahratta Railway from 1902.

Appendix 17.
Goods earnings.

APPEN

Gross earnings in thousands *of rupees*

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the

Gauge.	5′ 6″																					
Class: No.	1	2			3	4		5	6			7			8			9		10	
Calendar year.	E. I.	E. B. S. system.			B.C.	B. N. (a) & (b).	E. C.	O. and R.	N. W. system.			G. I. P. system.			B., B. and C. I. system.			N. G. S. system.		M. system.	
	*	5′ 6″ gauge.	Other gauges.	Total.					Commercial section.	Mily. section.	Total.	G. I. P. (a) to (c).	I. M. (d) to (h).	Total.	B., B. & C. I. (a) to (e) & (l) & (m).	R. M. (f) to (k)	Total.	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) & (e).
General Merchandise.																					
1898	2,62,97	49,31	31,24	80,55	2,11	39,92	9,66	44,87	2,15,90	13,50	2,29,40	2,82,57	38,84	2,91,41	1,08,75	1,51,45	2,60,20	16,41	...	56,02	...
1899	2,87,87	50,31	35,25	85,56	3,02	52,95	14,37	51,92	2,01,48	12,61	2,14,09	2,54,05	47,39	3,01,44	1,15,40	1,84,01	2,99,41	19,92	50	58,78	32
1900	2,96,43	55,05	39,69	94,74	4,78	78,98	23,86	49,54	1,59,49	14,17	1,73,66	2,82,65	77,72	3,10,37	1,19,32	2,15,20	3,34,52	26,14	5,63	58,82	58
1901	2,86,01	51,85	38,07	89,92	4,16	50,36	*	59,59	2,48,32	16,82	2,65,14	2,94,92	62,90	3,57,82	97,81	1,92,34	2,90,15	19,22	9,33	78,70	1,02
1902	2,74,84	59,18	40,34	99,52	3,86	54,19	*	54,84	2,40,17	14,17	2,54,34	2,90,82	66,12	3,56,94	97,91	1,77,44	2,75,35	21,06	11,09	75,89	1,68
Coal and coke for the public and for Foreign railways.																					
1898	1,27,02	1,78	40	2,18	18	4,53	17	75	1,13	48	1,61	8,65	15	8,80	2,36	67	3,03	13,80	...	7,59	...
1899	1,35,30	1,38	43	1,78	20	5,20	3,12	1,00	60	31	91	3,23	55	3,78	2,90	72	3,62	12,19	...	7,18	...
1900	1,57,12	2,04	65	2,69	25	6,73	4,94	1,15	44	20	64	4,36	25	4,61	4,21	76	4,97	14,64	8	7,95	...
1901	1,80,25	2,33	46	2,79	31	8,70	*	1,23	92	30	1,22	3,57	61	4,18	2,82	63	3,45	12,31	19	13,65	...
1902	1,71,72	1,94	64	2,58	26	10,56	*	1,91	1,30	23	1,53	3,54	98	4,52	1,50	66	2,16	12,84	23	12,14	...
Military Stores.																					
1898	4,83	1	...	1	...	8	...	40	10,78	52	11,30	1,65	26	1,91	14	1,14	1,28	10	...	76	...
1899	3,50	1	...	1	...	5	3	26	4,09	39	4,48	2,03	42	2,44	22	90	1,12	26	...	60	1
1900	4,31	1	...	1	...	16	11	57	3,99	61	4,60	1,83	11	1,94	20	71	91	15	1	56	1
1901	3,13	1	...	1	2	4	*	35	5,40	1,28	6,68	1,90	64	2,04	16	49	65	24	6	94	6
1902	3,46	1	...	1	3	5	*	70	7,22	1,81	9,03	2,63	1,77	4,40	20	92	1,12	20	5	129	30
Live Stock.																					
1898	1,74	2	2	4	...	1	1	13	2,08	18	2,26	1,86	17	2,03	3,29	77	4,06	7	...	30	...
1899	1,88	2	2	4	...	4	1	23	1,59	12	1,71	2,47	10	2,57	4,15	1,40	5,55	6	...	46	...
1900	2,21	2	2	4	...	9	2	15	1,19	21	1,39	3,68	57	4,25	3,70	40	4,10	9	4	63	3
1901	1,92	2	...	2	...	23	*	18	1,13	31	1,44	3,70	15	3,85	3,10	2,52	5,62	6	...	44	...
1902	2,08	1	...	1	...	55	*	17	1,74	25	1,99	2,93	19	3,12	3,43	79	4,22	9	9	78	...
Revenue Stores, including coal, and Material for construction.																					
1898	17,25	2,51	1,38	3,89	21	3,46	1,78	3,17	14,21	2,65	16,86	9,46	2,46	11,92	3,78	4,33	8,11	92	...	1,64	...
1899	17,56	2,79	1,77	4,56	8	5,26	2,81	4,27	13,56	3,09	16,65	9,69	3,17	12,86	5,40	6,11	11,51	1,78	2	1,78	2
1900	18,15	2,32	2,50	4,82	19	4,70	2,99	4,16	12,15	2,30	14,45	9,18	4,12	13,30	4,50	6,91	11,41	1,49	96	1,93	2
1901	19,28	2,28	2,33	4,61	3	6,21	*	4,64	14,91	2,73	17,64	7,16	4,93	12,11	4,32	6,64	10,96	1,00	1,23	3,06	1
1902	20,75	3,13	2,52	5,65	9	11,67	*	6,83	18,50	3,02	21,52	9,55	5,53	15,08	3,78	6,25	10,03	1,10	1,25	4,33	2

* Transferred partly to the Bengal-Nagpur railway

† Decrease, due to ballast train earnings usually credited to "Railway material"

†† Included with the

DIX 17.

from Goods traffic of each railway (by systems).

27, 29, 30 and 31 of Report.)

key to the code letters used to denote railway systems.

3′ 3¾″													2′ 6″					2′ 0″				Totals.	Gauge. Class: No.
12	13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32		
B. D.	D. S.	A. B.	D.	* B. and N. W.	R. and K. system. R. and K. (a) & (b)	P. L. (c)	J. B.	U. C.	B. G. J. P.	S. M.	W. I. P.	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.		Calendar Year.
General Merchandise.																								
1,84	2,92	3,24	5	29,90	6,96	...	7,64	50	9,65	45,00	1,09	36,96	40,09	1,33	1,08	6	...	49	3,93	5	4	83	14,87,12	1898
1,84	3,11	4,19	4	36,80	8,64	...	14,10	1,06	10,76	50,02	3,40	39,99	38,13	1,58	1,32	6	1	52	3,85	11	4	83	16,10,53	1899
2,27	3,58	4,78	4	36,11	8,97	...	11,54	2,15	12,47	51,41	1,73	37,84	51,65	1,62	97	9	2	50	4,53	15	5	73	16,90,35	1900
3,28	3,30	7,44	5	42,74	8,68	23	11,39	1,13	7,76	44,20	1,89	45,57	56,16	98	1,37	9	1	44	4,07	21	6	67	17,53,14	1901
3,36	3,24	6,03	2	47,72	9,29	32	13,06	1,09	6,97	52,25	††	46,51	60,83	70	1,20	8	3	40	4,10	22	7	63	17,40,72	1902
Coal and coke for the public and for foreign railways.																								
3	3,72	13	...	53	...	...	1	...	8	18	...	18	...	1	...	...	...	...	12	...	...	...	1,74,65	1898
8	4,27	20	...	73	1	...	2	...	11	11	...	39	...	7	...	...	...	...	14	...	...	...	1,80,41	1899
13	4,07	23	...	73	1	...	14	...	8	12	...	22	1	2	...	...	...	...	18	...	...	...	2,11,71	1900
9	4,83	31	...	75	1	...	19	1	...	13	...	37	...	1	...	...	...	1	12	...	...	...	2,35,01	1901
17	4,07	25	1	1,02	1	...	16	2	...	21	††	19	...	...	...	...	...	4	15	...	...	...	2,26,75	1902
Military Stores.																								
...	...	...	...	...	4	...	...	...	...	19	...	3	24	...	...	...	...	...	2	...	...	...	21,19	1898
...	...	2	...	...	2	...	...	...	...	10	...	3	15	...	...	...	...	...	3	...	...	...	13,41	1899
...	...	1	...	...	2	...	...	...	...	13	...	6	19	...	...	...	...	...	3	...	...	...	13,78	1900
...	...	1	...	...	4	...	2	...	...	19	...	19	27	...	...	...	...	...	3	...	...	...	14,92	1901
...	...	5	...	...	8	...	8	...	...	42	††	10	26	...	...	...	...	...	4	...	...	...	21,67	1902
Live Stock.																								
...	1	...	...	1	...	...	1	...	1	9	...	8	1,57	...	...	...	...	...	...	...	...	...	12,41	1898
...	1	1	...	2	1	...	1	...	3	12	...	6	1,17	...	...	...	...	...	...	...	...	...	13,99	1899
...	1	2	...	1	...	...	9	4	5	13	...	18	3,46	6	...	...	...	...	...	...	...	...	15,09	1900
...	...	1	...	2	...	...	2	...	1	12	...	16	1,34	...	...	...	...	...	...	...	...	...	15,44	1901
...	...	1	...	2	...	...	2	...	1	16	††	13	1,68	...	...	...	...	...	...	...	...	...	15,13	1902
Revenue Stores, including coal, and material for construction.																								
8	1	1,92	...	1,88	23	...	34	...	26	3,21	...	1,52	2,32	1	...	...	...	...	15	...	...	...	81,38	1898
8	4	1,99	...	3,36	20	...	44	1	17	3,71	2	1,28	3,45	1	...	...	...	...	19	...	...	...	94,11	1899
6	4	1,64	...	2,89	26	...	82	2	19	3,87	3	1,24	3,54	1	...	...	...	...	20	...	...	...	93,32	1900
3	2	†96	...	3,37	27	1	87	1	11	3,72	4	1,33	4,82	2	...	1	...	...	4	...	...	...	96,41	1901
5	2	1,47	...	3,74	35	...	1,16	1	9	3,96	††	1,68	3,82	...	...	3	...	...	23	...	...	...	1,14,93	1902

And partly to the Madras railway from the 1st January 1901.

for construction," having been credited to "Sundries" in 1901.

Southern Mahratta railway.

Appendix 18.
Principal Commodities—Summary.

APPEN

Sum

of

Principal commodities carried by Indian railways treated as one

(Referred to in para

(Details for each railway system

Progressive No.	Description of commodity.	Quantity.		Earnings.		Quantity.		Earnings.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes	13,415	15,358	3,52,892	3,52,383	1,943	...	...	509
II	Coal and coke carried for the public and foreign railways	8,245,804	8,026,590	2,35,01,922	2,26,76,009	...	219,214	...	8,25,913
III	Cotton—								
	1. Raw	822,011	914,004	1,30,86,319	1,35,69,180	91,993	...	4,82,861	...
	2. Manufactured—								
	(*a*) Twist and yarn, European	42,129	38,141	5,74,823	5,41,152	...	3,988	...	33,671
	(*b*) Twist and yarn, Indian	130,272	139,444	15,18,808	16,07,701	9,172	...	88,893	...
	(*c*) Piece-goods, European	212,785	221,172	43,62,523	43,24,258	8,387	...	...	38,265
	(*d*) Piece-goods, Indian	136,256	136,361	24,24,018	23,43,676	105	...	...	80,342
	(*e*) Others	5,252	6,747	1,05,747	1,41,657	1,495	...	35,910	...
	Total	1,348,705	1,455,869	2,20,72,238	2,25,27,624	107,164	...	4,55,386	...
IV	Chemicals, excepting Saltpetre	8,432	10,637	1,61,735	1,89,151	2,205	...	27,916	...
V	Drugs—								
	1. Intoxicating, other than opium	36,407	1,937	4,39,716	34,354	...	34,470	...	3,96,362
	2. Non-intoxicating—								
	(*a*) Medicinal preparations	2,267	2,517	50,889	57,769	250	...	6,880	...
	(*b*) Others	39,831	38,119	5,55,819	5,13,799	...	1,712	...	42,020
	Total	78,505	42,573	10,37,424	6,05,922	...	35,932	...	4,31,502
VI	Dyes and tans—								
	1. Alizarine and aniline dyes	4,685	4,681	1,04,005	1,16,438	...	4	12,433	...
	2. Cutch	5,336	7,138	54,293	75,177	1,802	...	20,884	...
	3. Indigo	11,110	9,739	2,15,241	1,67,063	...	1,371	...	48,178
	4. Myrabolams	70,926	81,730	5,65,410	6,12,760	10,804	...	47,350	...
	5. Tanning barks	77,300	68,638	3,80,999	3,53,731	...	8,662	...	27,259
	6. Turmeric	64,140	77,606	7,13,335	8,71,778	13,466	...	1,58,443	...
	7. Others	29,778	28,602	3,87,586	3,86,132	...	1,176	...	1,454
	Total	263,275	278,134	24,20,869	25,83,079	14,859	...	1,62,219	...
VII	Fodder—								
	1. Oil-cake	130,646	143,385	5,36,507	6,04,457	12,739	...	67,950	...
	2. Hay, straw and grass	163,439	186,639	5,63,120	9,27,841	23,200	...	3,64,721	...
	Total	294,085	330,024	10,99,627	15,32,298	35,939	...	4,32,671	...
VIII	Fruits and vegetables, fresh	222,473	230,815	14,23,911	15,72,360	8,342	...	1,48,449	...
IX	Grain and pulse—								
	1. Gram and pulse	1,576,786	1,308,947	1,15,03,558	88,72,543	...	267,839	...	26,31,015
	2. Jawar and bajra	1,174,386	891,668	73,26,006	52,65,930	...	282,718	...	20,60,076
	3. Rice in the husk	1,085,197	1,058,593	45,75,619	43,77,028	...	26,604	...	1,98,591
	4. Rice not in the husk	1,715,525	1,488,948	90,13,363	81,44,993	...	226,577	...	8,68,370
	5. Wheat	1,619,650	1,860,627	1,39,42,726	1,63,59,522	240,977	...	24,16,796	...
	6. Wheat flour	120,310	142,780	7,48,654	8,85,604	22,470	...	1,36,950	...
	7. Others	735,326	788,253	42,38,416	49,45,378	52,927	...	7,06,962	...
	Total	8,027,180	7,539,816	5,13,48,342	4,88,50,998	...	487,364	...	24,97,344
	Carried over	18,501,874	17,929,816	10,34,18,451	10,08,89,824	...	572,058	...	25,28,627

DIX 18.

mary

Appendix 18.
Principal Commodities—Summary.

system and the earnings therefrom during the Calendar year 1902.

graph 32 of Report.)

are shown in Appendix 19.)

Progressive No.	Description of commodity—*contd.*	Quantity.		Earnings.		Quantity.		Earnings.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
	Brought forward	Tons. 18,501,874	Tons. 17,929,816	Rs. 10,34,18,451	Rs. 10,08,89,824	...	572,058	...	Rs. 25,28,627
X	Hides and skins—								
	1. Hides of cattle—								
	(*a*) Dressed or tanned	8,977	4,846	1,01,939	57,826	...	4,131	...	44,113
	(*b*) Raw	82,304	83,554	8,60,796	8,04,063	1,250	...	...	56,733
	2. Skins of sheep and other animals—								
	(*a*) Dressed or tanned	11,198	8,365	1,16,391	90,466	...	2,833	...	25,925
	(*b*) Raw	72,195	71,812	6,97,568	7,27,442	...	383	29,874	...
	Total	174,674	168,577	17,76,694	16,79,797	...	6,097	...	96,897
XI	Horns	5,941	5,887	55,752	63,873	...	54	8,121	...
XII	Hemp (Indian) and other fibres, excluding jute	72,366	71,845	5,59,758	5,55,228	...	521	...	4,530
XIII	Jute—								
	1. Raw	777,041	968,396	50,31,180	63,43,163	191,385	...	13,11,983	...
	2. Gunny bags and cloth	255,384	250,978	21,91,978	20,72,941	...	4,406	...	1,19,037
	Total	1,032,395	1,219,374	72,23,158	84,16,104	186,979	...	11,92,946	...
XIV	Lac	32,333	33,936	3,68,196	3,91,936	1,603	...	23,760	...
XV	Leather—								
	1. Unwrought	8,093	8,096	1,24,138	1,21,751	3	...	...	2,387
	2. Wrought, excepting boots and shoes	7,383	6,718	1,34,700	1,13,264	...	665	...	21,436
	Total	15,476	14,814	2,58,838	2,35,015	...	665	...	23,823
XVI	Liquors—								
	1. Ale and beer	44,590	50,900	4,19,435	4,56,392	6,310	...	36,957	...
	2. Wines and spirits of all kinds, including country spirit	26,659	28,089	4,40,036	4,81,017	1,430	...	40,981	...
	3. All other sorts, including toddy and fermented liquor other than ale and beer	10,604	10,143	41,933	36,067	...	461	14,134	...
	Total	81,853	89,132	9,01,404	9,93,476	7,279	...	92,072	...
XVII	Metals—								
	1. Brass, unwrought	7,991	11,915	97,560	1,64,925	3,924	...	67,365	...
	2. Brass, wrought	28,106	27,499	3,04,879	3,06,187	...	607	1,308	...
	3. Copper, unwrought	1,985	4,330	26,845	74,257	2,345	...	47,412	...
	4. Copper, wrought	5,816	6,788	81,866	1,13,460	972	...	31,594	...
	5. Iron and steel—								
	(*a*) Cast	26,025	29,189	2,37,568	3,02,780	3,164	...	65,212	...
	(*b*) Unwrought	42,817	50,438	2,44,548	3,30,495	7,621	...	85,947	...
	(*c*) Wrought	236,822	264,597	25,98,932	28,22,768	27,775	...	3,23,836	...
	(*d*) Manufactures	82,153	98,647	9,88,325	12,73,277	16,494	...	2,84,952	...
	6. Others	199,411	289,031	9,78,598	14,61,267	89,620	...	4,82,669	...
	Total	631,126	782,434	54,59,121	68,49,416	151,308	...	13,90,295	...
XVIII	Oils—								
	1. Kerosine	441,521	436,974	31,05,687	31,39,137	...	4,547	33,450	...
	2. Castor	10,850	19,919	79,193	1,13,842	9,069	...	34,649	...
	3. Cocoanut	17,550	16,773	1,73,817	1,70,006	...	777	...	3,811
	4. Mustard and rape	17,145	12,529	1,85,565	1,06,965	...	4,616	...	78,600
	5. Others	53,323	55,490	4,09,022	4,34,224	2,167	...	25,202	...
	Total	540,389	541,685	39,53,284	39,64,174	1,296	...	10,890	...
	Carried over	21,088,427	20,857,500	12,39,74,656	12,40,38,863	...	230,927	64,207	...

P. T. O.

Appendix 18.
Principal Commodities—Summary.

APPEN

Sum
of

Principal commodities carried by Indian railways treated as one
(Referred to in paragraph
(Details for each railway system

Progressive No.	Description of commodity—*contd.*	Quantity.		Earnings.		Quantity.		Earnings.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
	Brought forward	21,088,427	20,857,500	12,39,74,656	12,40,38,863	...	230,927	64,207	...
XIX	Oil-seeds—								
	1. Castor	219,854	243,941	11,90,254	13,44,987	24,087	...	1,54,733	...
	2. Earthnuts	87,193	130,929	1,88,988	2,91,320	43,731	...	1,02,332	...
	3. Linseed	524,596	487,872	36,45,667	35,40,300	...	36,724	...	1,05,367
	4. Poppy	89,378	91,201	7,48,855	7,40,556	1,823	...	...	8,299
	5. Rape and mustard	708,246	562,165	66,03,608	41,13,306	...	146,681	...	24,90,302
	6. Til or jinjili	322,487	341,213	25,52,598	26,97,892	18,726	...	1,45,294	...
	7. Cotton seed	232,075	291,746	20,54,739	23,62,021	59,671	...	3,07,282	...
	8. Others	263,326	207,351	18,56,891	14,37,661	...	55,975	...	4,19,230
	Total	2,447,160	2,356,418	1,88,41,600	1,65,28,043	...	90,742	...	23,13,557
XX	Opium	18,777	20,603	4,66,394	4,43,314	1,826	...	...	23,080
XXI	Paper and paste board	32,890	36,853	4,05,834	4,33,992	3,963	...	28,158	...
XXII	Provisions—								
	1. Dried fruits and nuts	169,846	149,856	18,70,309	17,37,266	...	19,990	...	1,33,043
	2. Ghee	83,788	81,792	11,04,343	11,07,205	...	1,996	2,862	...
	3. Others	334,094	380,857	28,02,343	32,31,982	46,763	...	4,29,639	...
	Total	587,728	612,505	57,76,995	60,76,453	24,777	...	2,99,458	...
XXIII	Railway plant and rolling-stock *carried for the Public and Foreign Railways*—								
	1. Locomotive engines and tenders and parts thereof.	3,130	3,368	16,346	26,109	238	...	9,763	...
	2. Carriages and trucks and parts thereof	13,538	9,422	76,463	36,163	...	4,116	...	40,300
	3. Materials—								
	(*a*) Steel rails and fish-plates	26,705	81,267	1,59,918	3,73,235	54,562	...	2,13,317	...
	(*b*) Sleepers and keys of steel and cast-iron	10,472	12,020	72,093	58,589	1,548	...	...	13,504
	(*c*) Others	207,945	368,956	10,22,626	12,00,865	161,011	...	1,78,239	...
	Total	261,790	475,033	13,47,446	16,94,961	213,243	...	3,47,515	...
XXIV	Salt	1,626,590	1,616,163	93,85,896	95,15,866	...	10,427	1,29,970	...
XXV	Saltpetre and other saline substances—								
	1. Saltpetre	43,414	57,095	3,21,501	4,63,716	13,681	...	1,42,215	...
	2. Other saline substances	33,906	40,141	2,74,986	3,13,677	6,235	...	38,691	...
	Total	77,320	97,236	5,96,487	7,77,393	19,916	...	1,80,906	...
XXVI	Silk—								
	1. Raw—								
	(*a*) Foreign	1,431	1,187	39,553	33,193	...	244	...	6,360
	(*b*) Indian	3,588	2,755	63,149	48,611	...	833	...	14,538
	2. Piece-goods—								
	(*a*) Foreign	276	250	11,845	10,280	...	26	...	1,565
	(*b*) Indian	344	403	10,527	12,349	59	...	1,822	...
	Total	5,639	4,595	1,25,074	1,04,433	...	1,044	...	20,641
XXVII	Spices—								
	1. Betel-nuts	84,403	89,327	9,18,106	9,75,800	4,924	...	57,694	...
	2. Cardamoms	1,767	2,917	32,431	42,595	1,150	...	10,164	...
	3. Chillies	86,451	105,348	8,66,475	10,10,604	18,897	...	1,44,129	...
	4. Ginger	6,558	7,444	81,305	87,978	886	...	6,673	...
	5. Pepper	5,999	6,568	1,18,351	1,31,315	569	...	12,964	...
	6. Others	66,716	61,659	7,05,266	6,79,649	...	5,057	...	25,617
	Total	251,894	273,263	27,21,934	29,27,941	21,369	...	2,06,007	...
	Carried over	26,398,215	26,350,169	16,36,42,316	16,25,41,259	...	48,046	...	11,01,057

DIX 18—*concluded.*

Appendix 18.
Principal Commodities—Summary.

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system and the earnings therefrom during the Calendar year 1902.
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are shown in Appendix 19.)

Progressive No.	Description of commodity—*concld.*	Quantity.		Earnings.		Quantity.		Earnings.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
	Brought forward	26,398,215	26,350,169	16,36,42,316	16,25,41,259	...	48,046	...	11,01,057
XXVIII	Stone and lime	1,209,789	1,236,606	24,94,587	25,38,925	26,817	...	44,338	...
XXIX	Sugar—								
	1. Refined or crystallized, including sugarcandy	290,700	310,203	35,19,349	36,66,349	19,503	...	1,47,000	...
	2. Unrefined—								
	(*a*) Sugar	252,962	242,365	15,12,094	15,58,154	...	10,597	46,060	...
	(*b*) *Gur, rab*, jaggery, molasses and other saccharine produce	900,649	826,302	62,72,776	55,02,288	...	74,347	...	7,70,488
	Total	1,444,311	1,378,871	1,13,04,219	1,07,26,791	...	65,440	...	5,77,428
XXX	Tea—								
	1. Foreign	1,261	2,268	27,579	46,931	1,007	...	19,352	...
	2. Indian	100,457	103,105	13,35,163	13,32,060	2,648	...	...	3,103
	Total	101,718	105,373	13,62,742	13,78,991	3,655	...	16,249	...
XXXI	Tobacco—								
	1. Unmanufactured	220,243	208,070	17,78,433	16,99,093	...	12,173	...	79,340
	2. Manufactured—								
	(*a*) Cigars	5,087	5,002	93,397	90,076	...	85	...	3,321
	(*b*) Other sorts	11,228	14,482	1,40,501	1,94,956	3,254	...	54,455	...
	Total	236,558	227,554	20,12,331	19,84,125	...	9,004	...	28,206
XXXII	Wood—								
	1. Timber, unwrought	857,413	948,666	27,35,169	31,62,941	91,253	...	4,27,772	...
	2. Manufactures	63,727	69,443	4,64,930	5,38,713	5,716	...	73,783	...
	Total	921,140	1,018,109	32,00,099	37,01,654	96,969	...	5,01,555	...
XXXIII	Wool—								
	1. Raw	28,482	29,445	5,91,482	5,35,590	963	...	...	55,892
	2. Manufactured—								
	(*a*) Carpets and rugs	2,377	2,568	44,328	45,226	191	...	898	...
	(*b*) Piece-goods, European	1,988	2,583	46,971	45,286	595	...	...	1,685
	(*c*) Piece-goods, Indian	5,155	4,860	1,04,452	1,01,276	...	295	...	3,176
	(*d*) Other sorts of manufactures	3,973	4,281	69,339	65,365	308	...	...	3,974
	Total	41,975	43,737	8,56,572	7,92,743	1,762	...	...	63,829
XXXIV	All other articles of merchandise—	2,653,289	2,760,462	1,54,39,851	1,52,49,456	109,173	...	...	1,90,395
	GRAND TOTAL	33,006,995	33,120,881	20,03,12,737	19,89,13,944	113,886	...	...	13,98,773
	Animals—								
	1. Horses	10,562	24,915	3,25,058	4,18,100	14,353	...	93,042	...
	2. Cattle	51,790	33,686	7,01,607	4,17,744	...	18,104	...	2,83,863
	3. Sheep, etc.	32,967	126,397	5,02,571	6,03,231	93,436	...	1,01,129	...
	4. Elephants		6		519				
		95,319	(*a*) 187,207	15,29,236	(*a*)15,17,462	91,888	...	...	11,774

(*a*) Including 2,203 tons and Rs. 77,868 of live stock on the Madras railway not included in the details.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity.	Gauge.	5′ 6″							
		Classification No.	1		2		3		4	
		Railway.	East Indian.		Eastern Bengal.		Bengal Central.		Bengal-Nagpur (a) & (b).	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes		3,372	1,62,228	1,300	15,972	49	368	277	7,000
II	Coal and coke carried for the public and foreign railways		5,042,145	1,71,72,596	295,241	2,58,038	24,597	26,083	906,209	10,55,527
III	Cotton—									
	1. Raw		62,457	8,68,235	2,217	11,243	140	903	12,776	1,60,667
	2. Manufactured—									
	(a) Twist and yarn, European		1,577	43,468	2,754	22,811	478	1,629	1,201	4,556
	(b) Twist and yarn, Indian		18,772	1,79,461	3,612	26,297	2	11	13,133	1,76,603
	(c) Piece-goods, European		65,733	16,50,710	27,490	2,71,597	1,717	5,373	3,984	38,744
	(d) Piece-goods, Indian		7,656	1,14,819	1,311	10,487	27	154	3,957	64,349
	(e) Others		1,868	42,940	...	...	...	...	...	...
		Total	158,063	28,99,633	37,384	3,42,435	2,364	8,070	35,051	4,44,919
IV	Chemicals, excepting Saltpetre		2,952	56,728	376	3,771	16	26	213	3,008
V	Drugs—									
	1. Intoxicating, other than opium		223	3,936	288	6,245	4	49	34	804
	2. Non-Intoxicating									
	(a) Medicinal preparations		514	17,974	...	...	25	362	...	...
	(b) Others		3,304	45,323	930	13,987	5	39	861	9,321
		Total	4,041	67,233	1,218	20,232	34	450	895	10,125
VI	Dyes and tans—									
	1. Alizarine and aniline dyes		284	7,139	...	...	...	...	...	...
	2. Cutch		1,576	19,428	222	1,651	3	14	...	...
	3. Indigo		2,487	69,775	169	1,976	...	...	...	...
	4. Myrabolams		5,538	48,052	...	...	...	...	21,472	1,72,832
	5. Tanning barks		4,520	12,925	...	...	4	24	...	...
	6. Turmeric		7,208	1,50,837	3,376	21,098	468	1,935	4,771	39,919
	7. Others		4,521	52,151	187	2,195	2	22	2,604	14,748
		Total	26,134	3,60,247	3,945	26,920	477	1,995	28,847	2,27,499
VII	Fodder—									
	1. Oil-cake		35,826	1,55,852	6,644	12,717	1,273	2,423	2,384	9,892
	2. Hay, straw and grass		27,191	1,17,375	20,278	21,396	15	56	971	2,648
		Total	63,017	2,73,227	26,922	34,113	1,288	2,479	3,355	12,540
VIII	Fruits and vegetables, fresh		12,862	1,87,747	6,852	36,648	4,982	13,872	9,605	67,855
IX	Grain and pulse—									
	1. Gram and pulse		266,115	17,34,984	58,651	1,96,862	2,183	5,102	33,359	1,70,321
	2. Jawar and bajra		22,603	82,401	...	...	...	...	...	...
	3. Rice in the husk		30,235	1,01,790	60,695	1,94,830	507	683	55,828	1,07,680
	4. Rice not in the husk		208,785	10,95,285	71,029	1,79,499	1,124	2,734	134,468	8,42,930
	5. Wheat		281,542	16,95,272	4,225	15,401	6	20	55,409	4,30,248
	6. Wheat flour		30,084	1,64,327	2,950	20,541	325	1,031	2,418	12,757
	7. Others		100,614	4,17,327	3,018	7,289	4	19	12,945	37,230
		Total	939,980	52,01,386	200,568	6,20,422	4,149	9,589	294,427	16,01,166
X	Hides and skins—									
	1. Hides of cattle—									
	(a) Dressed or tanned		1,063	17,312	16,412	87,193	...	...	...	...
	(b) Raw		20,797	2,93,604			553	3,035	9,452	86,691
	2. Skins of sheep, and other animals—									
	(a) Dressed or tanned		736	5,559	1,277	6,481	...	...	...	...
	(b) Raw		7,211	1,19,994			69	473	...	...
		Total	29,807	4,35,569	17,689	93,674	622	3,508	9,452	86,691
XI	Horns		758	9,685	226	996	...	...	656	4,910
XII	Hemp (Indian) and other fibres, excluding jute		22,675	1,51,024	1,087	7,136	86	381	9,647	52,558
XIII	Jute—									
	1. Raw		116,662	6,74,616	729,553	52,58,509	65,118	2,47,254	...	...
	2. Gunny bags and cloth		50,270	6,63,783	13,977	73,136	136	652	13,721	1,55,246
		Total	166,932	13,38,399	745,530	53,31,645	65,254	2,47,906	13,721	1,55,246
XIV	Lac		19,840	2,87,431	1,075	6,813	...	...	4,695	32,714
XV	Leather—									
	1. Unwrought		1,115	41,453	...	...	...	...	834	3,402
	2. Wrought, excepting boots and shoes		774	14,262	...	...	...	...	...	...
		Total	1,889	55,715	...	...	...	...	834	3,402
		Carried over	6,494,407	2,85,98,248	1,339,413	67,98,815	103,918	3,14,727	1,317,884	37,65,160

and the earnings therefrom during the Calendar year 1902.

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5′ 6″										
5		6		7		8				Progressive No.
						B., B. and C. I. system.				
Oudh and Rohilkhand.		North Western.		Great Indian Peninsula.		B., B. and C. I. (*a*) to (*e*) & (*l*) & (*m*).		R. M. (*f*) to (*k*).		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
918	11,425	3,478	80,167	1,242	53,902	479	11,267	722	19,340	I
47,626	1,91,473	42,360	1,53,116	163,390	4,51,898	42,050	1,50,437	17,791	65,982	II
14,161	99,562	74,619	8,92,277	312,427	73,99,257	152,747	13,08,686	82,607	14,10,254	III
2,926	23,767	2,317	55,195	7,811	1,56,659	264	3,564	304	3,173	
7,937	58,595	6,462	1,07,087	14,528	1,65,709	13,526	1,68,675	13,626	3,30,892	
9,976	73,716	22,055	6,22,827	26,582	7,98,023	4,988	1,04,787	8,315	1,69,508	
5,539	47,128	25,100	4,98,525	11,867	2,29,609	26,273	4,37,742	24,284	6,31,456	
376	3,668	782	15,921	664	22,068	695	13,594	875	28,019	
40,915	3,06,436	131,335	21,91,832	373,879	87,71,325	198,493	22,37,048	130,011	25,73,302	
502	5,353	3,196	52,007	1,311	39,405	201	3,975	100	1,533	IV
214	4,753	542	9,063	99	2,278	12	326	57	1,385	V
130	1,299	323	9,642	244	8,845	13	335	57	918	
1,313	13,999	9,010	1,38,605	3,249	87,312	4,137	54,099	2,196	46,388	
1,657	20,051	9,875	1,57,310	3,592	98,435	4,162	54,760	2,310	48,691	
126	1,352	556	17,785	1,367	49,992	515	12,019	419	11,311	VI
308	2,335	19	160	839	15,216	146	1,934	184	1,975	
137	1,917	1,625	36,117	266	7,644	69	995	743	6,893	
235	1,534	370	3,384	40,737	3,29,531	226	2,982	235	2,289	
2,575	15,054	314	1,452	11,451	53,520	662	7,087	2,228	15,028	
2,347	29,556	4,925	76,612	11,491	1,75,577	2,979	54,198	3,314	54,806	
756	5,982	5,681	86,806	2,875	42,579	3,173	58,021	3,100	78,314	
6,484	57,730	13,490	2,16,316	69,026	6,74,059	7,770	1,35,436	10,223	1,70,116	
3,879	16,759	8,933	38,725	11,727	70,134	7,188	51,361	7,137	19,293	VII
10,041	34,273	34,180	2,13,382	34,842	2,22,578	35,900	1,92,716	6,828	45,834	
13,920	51,032	43,113	2,52,107	46,569	2,92,712	43,088	2,44,077	13,965	65,127	
12,470	49,822	22,699	1,76,135	23,963	2,06,890	18,369	96,586	31,372	1,97,701	VIII
82,445	3,16,283	129,089	7,56,787	217,834	26,86,962	61,833	2,13,793	123,738	12,48,352	IX
23,881	79,419	182,858	10,68,831	162,405	13,98,200	76,578	2,61,971	126,276	10,68,260	
2,171	8,133	21,610	75,652	1,508	6,685	9,997	39,188	1,424	7,337	
33,761	1,36,746	120,309	7,85,445	117,097	9,34,110	134,940	10,92,383	59,317	3,44,876	
207,177	9,51,878	748,379	83,93,847	190,621	19,81,011	50,100	2,40,234	171,521	20,98,803	
8,494	29,072	43,691	2,02,096	14,985	1,35,767	7,649	60,369	10,362	89,438	
79,385	2,81,793	38,841	1,63,933	37,940	4,10,993	33,873	1,77,342	205,896	21,95,435	
437,314	18,03,324	1,285,677	1,14,46,591	742,390	75,53,818	374,070	20,85,280	698,534	70,52,901	
1	3	441	5,387	334	2,919	22	135	304	2,283	X
4,709	31,265	8,259	95,685	3,286	48,999	1,291	16,269	1,903	20,066	
...	...	161	1,839	65	1,114	48	680	89	716	
1,752	9,305	9,382	1,07,806	8,581	1,22,759	1,446	20,835	3,204	31,684	
6,462	40,573	18,243	2,10,717	12,266	1,75,701	2,807	37,919	5,500	54,743	
687	2,912	388	3,530	1,225	23,257	194	3,071	120	906	XI
8,738	26,455	781	5,087	12,891	2,04,563	779	6,631	1,435	11,789	XII
141	904	141	1,616	882	14,244	627	6,492	1,957	19,174	XIII
12,685	64,896	37,200	2,88,476	22,608	2,39,563	10,188	54,903	13,573	1,12,672	
12,826	65,800	37,341	2,90,092	23,490	2,53,807	10,815	61,395	15,530	1,31,846	
1,407	12,767	980	7,422	545	5,721	63	353	654	6,683	XIV
7	38	1,528	21,105	860	15,209	615	9,514	800	6,538	XV
176	2,472	1,886	35,946	1,056	26,238	1,182	13,648	490	7,591	
183	2,530	3,414	57,051	1,916	41,447	1,797	23,162	1,290	14,169	
592,109	26,47,683	1,616,370	1,52,99,474	1,477,695	1,88,46,940	705,137	51,51,397	929,557	1,04,14,629	

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Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity—*contd.*	5′ 6″ Gauge. Classification No. 1 — East Indian. Quantity.	East Indian. Earnings.	Classification No. 2 — Eastern Bengal. Quantity.	Eastern Bengal. Earnings.	Classification No. 3 — Bengal Central. Quantity.	Bengal Central. Earnings.	Classification No. 4 — Bengal-Nagpur (*a*) & (*b*). Quantity.	Bengal-Nagpur (*a*) & (*b*). Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
	Brought forward	6,494,407	2,85,98,248	1,339,413	67,98,815	103,918	3,14,727	1,317,884	37,65,160
XVI	LIQUORS—								
	1. Ale and beer	9,231	78,887	287	2,767	1	11	919	3,829
	2. Wines and spirits of all kinds, including country spirit	2,275	74,904	1,029	15,119	37	457	632	7,221
	3. All other sorts, including toddy and fermented liquor other than ale and beer	76	857	...	...	...	...	...	...
	TOTAL	11,582	1,54,648	1,316	17,886	38	468	1,551	11,050
XVII	METALS—								
	1. Brass, unwrought	893	12,491	397	2,645	2	19	...	...
	2. Brass, wrought	7,537	87,793	2,290	23,892	399	941	914	10,156
	3. Copper, unwrought	430	10,820	279	2,516	...	...	...	...
	4. Copper, wrought	1,087	29,512	176	2,296	13	17	339	3,675
	5. Iron and steel—								
	(*a*) Cast	13,502	1,44,426	876	5,165	11	44	348	5,534
	(*b*) Unwrought	22,695	34,452	...	...	...	...	...	...
	(*c*) Wrought	51,418	6,05,978	17,978	1,27,213	506	2,579	22,660	70,053
	(*d*) Manufactures	15,987	2,05,963	4,918	37,654	37	249	2,578	32,249
	6. Others	6,717	1,27,904	2,422	27,918	594	2,380	156,390	1,74,243
	TOTAL	120,266	12,59,339	29,336	2,29,299	1,562	6,229	183,229	2,95,910
XVIII	OILS—								
	1. Kerosine	75,525	7,06,780	130,460	2,75,288	2,469	5,823	16,178	1,52,047
	2. Castor	2,083	15,056	108	811	3	15	529	4,334
	3. Cocoanut	2,210	29,824	1,617	15,452	188	445	659	4,176
	4. Mustard and rape	3,838	37,579	2,496	24,286	942	2,415	...	...
	5. Others	2,761	42,372	698	3,900	12	44	2,039	16,882
	TOTAL	86,417	8,21,611	135,379	3,19,737	3,614	8,742	19,405	1,77,439
XIX	OIL SEEDS—								
	1. Castor	34,135	2,06,372	506	1,513	...	...	...	...
	2. Earthnuts	66	471	...	...	...	...	...	...
	3. Linseed	188,816	13,71,153	27,027	78,646	1,196	2,606	10,319	66,280
	4. Poppy	31,342	2,21,441	...	...	...	...	...	...
	5. Rape and mustard	200,201	11,95,870	42,053	2,68,557	2,245	4,372	6,049	43,259
	6. Til or jinjili	14,053	64,437	731	3,203	180	442	22,062	2,10,343
	7. Cotton seed	36,407	1,83,619	...	...	...	...	...	...
	8. Others	6,493	45,058	978	3,302	36	114	11,803	53,612
	TOTAL	511,423	32,88,421	71,295	2,55,221	3,657	7,534	50,224	3,73,494
XX	OPIUM	8,066	1,96,589	48	591	2	19	52	1,808
XXI	PAPER AND PASTE-BOARD	9,732	1,56,136	6,321	8,978	139	1,242	841	12,320
XXII	PROVISIONS—								
	1. Dried fruits and nuts	6,630	74,290	243	1,866	302	1,254	6,165	53,137
	2. Ghee	18,980	4,09,306	839	8,747	43	246	2,902	27,970
	3. Others	78,552	9,04,526	11,470	83,906	192	1,005	2,812	28,497
	TOTAL	104,162	13,88,122	12,552	93,619	537	2,499	10,979	1,09,604
XXIII	RAILWAY PLANT AND ROLLING STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS—								
	1. Locomotive engines and tenders and parts thereof	1,026	12,184	697	217	...	...	159	2,304
	2. Carriages and trucks and parts thereof	6,696	19,460	51	21	...	...	423	2,118
	3. Materials—								
	(*a*) Steel rails and fish-plates	19,166	1,74,751	582	3,648	...	...	449	1,915
	(*b*) Sleepers & keys of steel and cast-iron	249	1,651	4,649	9,580	...	...	1,140	13,527
	(*c*) Others	77,256	3,76,424	2,606	9,824	...	...	43,297	2,15,596
	TOTAL	104,393	5,84,479	8,585	23,290	...	...	45,468	2,35,460
XXIV	SALT	225,593	10,98,045	73,715	3,65,693	3,799	8,958	81,071	4,58,191
XXV	SALTPETRE AND OTHER SALINE SUBSTANCES—								
	1. Saltpetre	24,097	2,61,627	4	11	3	22	...	...
	2. Other saline substances	18,721	1,51,410	2,094	6,489	79	327	...	...
	TOTAL	42,818	4,13,037	2,098	6,500	82	349	...	...
	Carried over	7,718,859	3,79,58,666	1,680,058	81,19,629	117,348	3,50,767	1,710,704	54,40,436

DIX 19—*continued.*

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar ye ar 1902.

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5′ 6″										
5		6		7		8				Progressive No.
						B., B. and C. I. System.				
Oudh and Rohilkhand.		North Western.		Great Indian Peninsula.		B., B. and C. I. (*a*) to (*e*) & (*l*) & (*m*).		Rajputana-Malwa (*f*) to (*k*).		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
592,109	26,47,683	1,616,370	1,52,99,474	1,477,695	1,88,46,940	705,137	51,51,397	929,557	1,04,14,629	
7,845	30,983	8,277	82,639	8,803	1,14,691	1,764	21,638	2,741	22,467	XVI
2,079	29,807	3,989	1,22,113	3,446	81,271	2,432	26,508	798	16,871	
...	...	160	3,085	497	3,557	43	888	211	3,698	
9,924	60,790	12,426	2,07,837	12,656	1,99,519	4,239	49,034	3,750	43,036	
49	576	555	5,560	2,428	49,901	1,402	17,211	1,696	37,886	XVII
3,571	26,013	1,494	20,533	2,214	42,313	1,445	16,604	2,505	35,016	
91	456	278	4,562	858	19,222	764	9,898	856	20,414	
160	1,259	836	13,678	1,046	21,929	800	10,316	915	17,270	
1,661	11,292	1,532	21,788	2,834	45,344	955	11,485	844	11,502	
27	109	1,638	12,132	11,802	1,86,359	994	8,650	1,099	9,764	
13,062	76,222	41,388	7,07,290	28,443	4,67,660	18,921	1,79,119	17,512	1,99,026	
3,192	21,327	7,819	1,27,686	16,045	3,17,912	8,308	1,05,852	5,896	85,275	
1,028	4,742	2,873	49,757	96,314	8,24,634	3,528	37,546	4,697	79,922	
22,841	1,41,996	58,413	9,62,986	161,984	19,76,274	37,117	3,96,681	36,020	4,96,575	
15,744	85,328	17,991	3,36,193	45,811	6,48,754	14,563	1,46,060	8,970	78,596	XVIII
179	1,248	283	3,673	844	10,594	1,081	7,578	1,503	7,424	
82	407	601	7,379	2,625	41,964	806	10,384	458	9,814	
600	2,736	1,901	19,086	89	2,597	359	1,888	832	4,595	
649	3,570	3,241	31,459	9,482	99,689	2,741	25,894	1,620	14,897	
17,254	93,289	24,017	3,97,790	58,851	8,03,598	19,550	1,91,804	13,383	1,15,426	
4,519	17,181	105	907	56,855	3,82,705	5,304	42,569	12,206	13,196	XIX
36	104	45	942	6,567	61,209	370	3,809	119	1,128	
32,679	1,39,153	9,851	1,44,129	94,921	11,66,076	7,219	52,510	6,179	57,295	
14,984	59,039	677	4,340	18,771	2,71,717	8,299	68,058	10,129	86,334	
53,537	2,06,616	28,572	2,56,239	101,314	14,59,324	26,351	1,85,369	33,632	2,98,881	
7,476	28,790	26,672	2,01,237	105,269	12,16,902	33,795	1,99,748	23,388	1,59,976	
...	...	72,585	3,44,522	164,796	17,52,658	...	...	...	...	
14,163	64,520	39,103	4,17,188	24,460	2,16,436	6,774	38,412	5,501	31,705	
127,385	5,15,463	177,910	13,99,814	572,953	65,27,027	88,112	5,90,475	91,145	6,47,715	
849	15,308	83	968	456	16,718	2,434	76,828	3,382	56,023	XX
2,741	14,822	2,516	40,547	3,241	53,686	2,279	32,874	1,775	30,394	XXI
1,924	19,745	21,828	4,15,164	31,164	5,00,108	16,357	1,64,806	11,138	1,41,641	XXII
3,867	21,466	9,233	1,03,370	16,284	2,21,745	5,027	66,779	7,711	93,284	
1,977	17,725	9,389	1,55,055	35,500	3,63,003	23,578	1,14,654	8,645	60,097	
7,768	58,936	40,450	6,73,589	82,948	10,84,856	44,962	3,46,239	27,494	2,95,022	
55	215	...	...	517	4,458	95	438	101	647	XXIII
6	9	...	...	34	275	1,561	6,920	33	5,273	
6,253	13,649	...	...	5,756	34,055	4,926	21,682	32,979	69,189	
...	...	...	...	3,002	20,605	2	5	803	7,262	
12,952	45,930	170,671	3,73,340	2,575	13,637	21,933	80,023	23,272	4 3,533	
19,266	59,803	170,671	3,73,340	11,884	73,030	28,517	1,09,068	56,288	1,25,904	
64,785	3,10,425	104,667	7,03,567	177,360	17,16,227	181,104	4,67,803	257,378	22,43,711	XXIV
749	2,813	5,126	33,366	315	4,339	2,415	23,051	10,217	85,979	XXV
154	696	7,423	68,380	2,620	30,525	963	11,921	1,907	15,928	
903	3,509	12,549	1,01,746	2,935	34,864	3,378	34,972	12,124	1,01,907	
865,825	39,22,024	2,220,072	2,01,61,658	2,562,963	3,13,26,739	1,116,829	74,47,175	1,432,796	1,45,70,342	

P. T. O.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity—*contd.*	Gauge	5′ 6″							
		Classification No.	1		2		3		4	
		Railway.	East Indian.		Eastern-Bengal.		Bengal Central.		Bengal-Nagpur (*a*) & (*b*).	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
	Brought forward		7,718,859	3,79,58,666	1,680,058	81,19,629	117,348	3,50,767	1,710,704	54,40,436
XXVI	SILK—									
	1. Raw—									
	(*a*) Foreign		1	73	416	7,050	...	...	...	...
	(*b*) Indian		998	12,329			...	...	403	6,860
	2. Piece-goods—									
	(*a*) Foreign		2	128	...	...	...	...	...	...
	(*b*) Indian		130	4,274	...	...	...	...	...	...
		TOTAL	1,131	17,204	416	7,050	...	...	403	6,860
XXVII	SPICES—									
	1. Betel-nuts		9,843	2,10,470	11,552	1,01,827	4,698	18,524	3,851	29,493
	2. Cardamoms		466	10,424	239	5,120	...	...	...	...
	3. Chillies		7,245	1,28,866	3,616	28,806	193	533	5,539	62,216
	4. Ginger		831	7,915	1,186	17,767	...	...	...	...
	5. Pepper		789	20,165	385	6,541	...	...	...	...
	6. Others		8,800	1,57,433	1,554	9,704	273	895	2,732	19,912
		TOTAL	27,980	5,35,273	18,532	1,69,765	5,164	19,952	11,852	1,11,621
XXVIII	STONE AND LIME		265,068	9,63,245	24,562	37,686	1,698	1,305	33,032	1,28,632
XXIX	SUGAR—									
	1. Refined or crystallized, including sugarcandy		21,148	1,83,196	11,021	73,234	592	2,255	11,120	76,045
	2. Unrefined—									
	(*a*) Sugar		61,923	4,21,443	10,707	45,808	2,971	7,116	...	...
	(*b*) *Gur, rab*, jaggery, molasses and other saccharine produce		112,723	5,32,676	16,573	88,383	888	2,376	12,522	1,20,055
		TOTAL	195,794	11,37,315	38,301	2,07,425	4,451	11,747	23,642	1,96,100
XXX	TEA—									
	1. Foreign		1	5	34,630	7,11,218	...	...	...	...
	2. Indian		1,476	22,118			...	...	746	12,296
		TOTAL	1,477	22,123	34,630	7,11,218	...	...	746	12,296
XXXI	TOBACCO—									
	1. Unmanufactured		31,021	3,13,976	26,773	2,75,684	1,075	3,839	5,847	49,730
	2. Manufactured—									
	(*a*) Cigars		137	4,510	324	5,255	...	...	...	...
	(*b*) Other sorts		1,792	51,520			6	50	362	6,454
		TOTAL	32,950	3,70,006	27,097	2,80,939	1,081	3,889	6,209	56,184
XXXII	WOOD—									
	1. Timber, unwrought		63,075	2,30,316	10,099	43,937	1,729	4,045	39,251	1,68,775
	2. Manufactures		7,776	76,110	2,673	22,329	356	1,770	1,744	13,791
		TOTAL	70,851	3,06,426	12,772	66,266	2,085	5,795	40,995	1,82,566
XXXIII	WOOL—									
	1. Raw		1,805	36,760	1,233	20,739	...	...	...	...
	2. Manufadtured—									
	(*a*) Carpets and rugs		665	17,861	79	977	...	...	...	...
	(*b*) Piece-goods, European		764	3,697			...	...	...	...
	(*c*) Piece-goods, Indian		614	19,829			...	...	...	...
	(*d*) Other sorts of manufactures		814	17,594			...	...	...	...
		TOTAL	4,662	95,741	1,312	21,716	...	...	...	...
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE		544,475	35,96,106	102,112	5,89,394	6,480	21,606	71,701	3,43,818
		GRAND TOTAL	8,863,267	4,50,02,105	1,939,792	02,11,088	138,307	4,15,061	1,899,284	64,78,513
	ANIMALS—									
	1. Horses		5,746	92,745	5	127	...	...	28	1,555
	2. Cattle		9,100	56,213	172	756	...	32	1,810	7,860
	3. Sheep, etc.		82,830	58,877	120	820	...	...	3,700	45,300
	4. Elephants		1	57	...	...	...	...	...	...
		TOTAL	97,977	2,07,892	297	1,703	...	32	5,538	54,715

DIX 19—*continued.*

and the earnings therefrom during the Calendar year 1902.

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5′ 0″										
5		6		7		8				Progressive No.
						B., B. and C. I. system				
Oudh and Rohilkhand.		North Western.		Great Indian Peninsula.		B., B. & C. I. (*a*) to (*e*) & (*l*) & (*m*).		Rajputana-Malwa (*f*) to (*k*).		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
865,825	39,22,024	2,220,072	2,91,61,658	2,562,963	3,13,26,739	1,116,829	74,47,175	1,432,296	1,45,70,342	
										XXVI
...	...	253	5,653	177	3,200	302	7,610	226	12,385	
...	...	282	9,074	50	2,195	160	4,267	8	187	
...	...	30	767	76	3,498	77	2,382	58	3,336	
2	23	64	1,319	38	1,153	77	2,188	46	2,565	
2	23	629	17,413	335	10,136	616	16,447	338	18,513	
										XXVII
1,713	28,256	489	5,236	2,514	1,64,069	1,066	18,567	789	10,943	
52	649	228	3,777	47	1,882	48	1,004	54	1,948	
1,615	16,188	5,597	51,718	10,791	1,18,444	2,120	20,703	3,411	34,271	
327	2,817	948	10,957	399	10,505	846	7,969	396	9,159	
106	980	745	23,396	466	19,387	546	11,525	438	15,252	
856	5,641	2,668	27,615	8,191	1,29,179	7,299	86,686	10,956	1,14,536	
4,669	54,531	10,675	1,22,699	27,408	4,43,466	12,425	1,46,454	16,044	1,86,109	
88,085	1,10,433	287,095	3,69,758	86,891	1,84,943	21,599	70,831	33,501	1,07,062	XXVIII
										XXIX
9,994	45,492	67,647	13,37,820	53,833	8,98,089	33,567	3,94,395	22,795	2,39,697	
55,978	2,62,704	16,209	1,17,770	8,783	82,919	235	1,037	45,908	3,76,488	
89,513	3,84,346	1,16,381	8,66,617	84,074	8,05,566	28,394	2,29,555	93,282	10,19,046	
155,395	6,92,542	200,237	23,22,207	146,690	17,81,574	62,196	6,24,987	161,985	16,35,231	
										XXX
...	...	636	17,385	98	1,357	393	5,331	374	10,282	
1,573	10,747	2,062	31,512	1,387	32,166	199	3,431	266	3,833	
1,573	10,747	2,698	48,847	1,485	33,523	592	8,762	640	14,115	
										XXXI
6,077	25,954	14,681	1,44,714	8,440	82,015	22,575	1,18,940	31,549	1,23,911	
130	1,165	215	6,466	778	25,418	436	4,735	174	4,991	
84	909	1,225	35,197	388	7,337	2,376	24,557	1,233	14,083	
6,291	28,028	16,121	1,86,377	9,606	1,14,770	25,387	1,48,232	12,956	1,42,985	
										XXXII
101,424	1,95,299	85,083	2,88,369	155,245	5,19,653	22,692	1,33,263	15,949	62,126	
3,310	18,361	10,479	82,485	4,839	74,766	3,625	25,838	3,593	20,400	
104,734	2,13,660	95,562	3,70,854	160,084	5,94,419	26,227	1,59,101	18,642	82,526	
										XXXIII
313	1,849	11,324	3,09,492	821	15,697	2,976	68,277	3,689	51,364	
1	6	247	4,215	53	2,241	209	4,631	158	7,762	
1	7	669	10,209	163	6,366	307	6,604	309	11,819	
316	3,665	1,446	31,248	541	13,256	302	6,187	514	13,516	
1	6	536	13,775	754	10,354	63	1,173	76	1,097	
632	5,533	14,222	3,60,129	2,832	47,914	3,857	86,872	4,746	86,098	
175,965	7,07,709	388,368	25,29,837	(*a*) 193,810	(*a*) 20,48,079	288,542	12,52,465	225,484	10,58,440	XXXIV
1,403,171	57,45,230	3,235,679	2,64,89,779	3,191,604	3,65,85,563	1,538,279	99,61,326	1,908,632	1,79,01,421	
629	13,425	15,350	1,70,854	919	64,522	224	9,159	457	15,727	
239	3,128	4,513	22,247	6,045	66,641	5,491	1,30,355	679	11,992	
4	259	8,743	6,423	10,682	1,81,354	10,710	2,93,909	4,901	59,902	
...	...	...	...	...	...	...	...	...	...	
872	16,812	28,606	1,99,524	17,637	3,12,517	16,425	6,43,483	5,097	78,681	

(*a*) Including 16,006 tons and Rs. 44,736 of the Gwalior Light railway of which details by commodities have not been furnished.

P. T. O.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity.	Gauge.	5′ 6″				3′ 3¾″			
		Classification No.	9		10		12		13	
		Railway.	Nizam's Guaranteed State.		Madras.		Bengal Dooars.		Dibru-Sadiya.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes		123	3,262	271	6,268	24	125	...	...
II	Coal and coke carried for the public and foreign railways		394,540	13,07,584	493,784	12,13,953	8,821	17,169	441,266	4,07,332
III	Cotton—									
	1. Raw		19,414	2,23,542	33,619	2,79,293	...	...	177	2,775
	2. Manufactured—									
	(*a*) Twist and yarn, European		2,029	28,027	5,576	52,933	...	...	...	...
	(*b*) Twist and yarn, Indian		2,667	40,071	14,120	1,11,877	46	168	...	...
	(*c*) Piece-goods, European		2,910	44,875	9,074	1,02,472	539	2,227	...	...
	(*d*) Piece-goods, Indian		1,804	25,849	7,347	78,513	11	79	...	...
	(*e*) Others		78	1,085	245	2,468	...	...	...	...
		Total	28,902	3,63,449	69,981	6,27,556	596	2,474	177	2,775
IV	Chemicals, excepting Saltpetre		110	1,811	71	1,916	...	...	...	...
V	Drugs—									
	1. Intoxicating, other than opium		17	285	7	81	...	...	32	570
	2. Non-Intoxicating—									
	(*a*) Medicinal preparations		91	1,853	248	5,309	...	...		
	(*b*) Others		644	7,104	2,106	27,828	49	297		
		Total	752	9,242	2,361	33,218	49	297	32	570
VI	Dyes and Tans—									
	1. Alizarine and aniline dyes		210	2,666	351	4,074	...	...	...	...
	2. Cutch		90	1,345	16	94	...	...	...	...
	3. Indigo		107	1,994	1,302	17,483	...	...	...	...
	4. Myrabolams		193	1,156	2,610	13,665	...	...	...	...
	5. Tanning barks		2,832	16,757	29,173	1,31,513	...	...	...	...
	6. Turmeric		904	10,976	14,402	1,10,002	...	...	...	...
	7. Others		175	2,045	1,345	12,137	32	143	...	...
		Total	4,511	36,939	40,289	2,88,968	32	143	...	...
VII	Fodder—									
	1. Oilcake		2,957	15,204	7,263	30,775	78	596	...	...
	2. Hay, straw and grass		2,033	5,386	1,981	8,271	153	562	...	...
		Total	4,990	20,680	9,244	39,046	231	1,158	...	...
VIII	Fruits and vegetables, fresh		3,484	29,889	13,484	91,655	...	...	...	...
IX	Grain and pulse—									
	1. Gram and pulse		19,100	1,01,640	78,765	4,04,795	992	2,246		
	2. Jawar and Bajra		45,489	2,13,113	46,602	1,50,433	...	...		
	3. Rice in the husk		2,788	17,489	137,238	5,18,272	794	1,155		
	4. Rice not in the husk		55,828	4,23,425	133,138	5,34,146	4,483	8,513	15,804	1,26,830
	5. Wheat		14,588	87,389	3,481	15,285	...	...		
	6. Wheat flour		2,652	15,665	3,672	20,377	175	601		
	7. Others		658	4,375	40,193	1,95,451	...	...		
		Total	141,103	8,63,096	443,089	18,38,759	6,354	12,515	15,804	1,26,830
X	Hides and skins—									
	1. Hides of cattle—									
	(*a*)—Dressed or tanned		13	182	2,189	25,035	83	318	...	...
	(*b*)—Raw		431	5,459	4,548	36,569			...	...
	2. Skins of sheep, and other animals—									
	(*a*)—Dressed or tanned		123	1,754	5,613	55,591	...	...	...	...
	(*b*)—Raw		2,477	24,413	21,311	1,91,203	...	...	...	...
		Total	3,044	31,808	33,661	3,08,398	83	318	...	...
XI	Horns		298	3,718	567	4,644	...	...	...	...
XII	Hemp (Indian) and other fibres, excluding jute		266	2,880	3,454	12,134	...	...	...	...
XIII	Jute—									
	1. Raw		41	116	218	1,069	12,340	30,563	...	...
	2. Gunny bags and cloth		4,260	34,977	14,452	98,992	66	141	...	...
		Total	4,271	35,093	14,670	1,00,061	12,406	30,704	...	...
XIV	Lac		36	427	121	2,212	...	...	...	...
XV	Leather—									
	1. Unwrought		628	8,898	791	7,211	...	...	...	...
	2. Wrought, excepting boots and shoes		199	2,185	414	5,713	...	...	...	...
		Total	827	11,083	1,205	12,924	...	...	...	...
		Carried over	587,257	27,20,952	1,126,252	45,80,712	28,596	64,903	457,279	5,37,507

and the earnings therefrom during the Calender year 1902.

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14		15		16		17				18		Progressive No.
Assam Bengal.		Deoghur.		Bengal and North-Western.		Rohilkund and Kumaon system.				Jodhpur-Bikaner.		
						R. & K. (*a*) & (*b*).		Powayan Light (*c*).				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
272	3,620	...	...	897	6,534	411	4,502	...	...	117	1,463	I
12,352	24,838	2,174	587	57,653	1,01,671	402	484	...	...	10,896	16,023	II
1,013	6,275	...	...	1,197	12,991	34	219	...	...	11,110	36,329	III
579	2,347	125	38	278	2,358	10	50			18	70	
133	1,238	110	35	4,526	48,052	1,580	7,422			479	3,205	
2,324	18,597	112	36	17,078	1,53,582	270	1,433	113	219	604	5,345	
142	1,618	...	...	5,531	47,898	2,118	12,940			2,481	15,731	
44	298	...	...	135	1,196	72	529			33	315	
4,235	30,373	347	109	28,745	2,66,071	4,084	22,593	113	219	14,725	60,995	
208	1,286	...	...	422	2,863	79	684	...	...	2	34	IV
10	226	...	...	182	2,584	62	907	...	...	19	240	V
31	1,288	...	...	99	254	17	240	...	...	24	319	
43	243	...	...	5,565	29,988	1,470	10,547	...	...	468	3,417	
134	1,737	...	...	5,846	32,826	1,549	11,694	...	...	511	3,976	
...	...	...	...	75	747	10	68	...	...	17	51	VI
59	220	...	...	1,050	10,260	421	1,451	...	...	2	22	
...	...	...	...	1,843	15,318	13	78	...	...	82	1,244	
2	6	...	...	50	368	26	146	...	...	7	23	
...	...	...	...	691	3,629	2,039	6,505	...	...	33	171	
43	271	...	...	4,124	31,548	442	2,514	...	...	230	1,843	
27	408	...	...	818	5,394	148	803	...	...	306	2,347	
131	905	...	...	8,651	67,264	3,099	11,565	...	...	677	5,671	
140	509	10	3	6,503	18,154	379	1,346	...	...	46	214	VII
335	683	...	...	4,272	18,289	1,024	4,691	...	...	838	3,444	
475	1,192	10	3	10,775	36,443	1,403	6,037	...	...	884	3,658	
379	2,299	...	...	4,458	20,266	548	2,663	...	...	899	4,954	VIII
8,308	12,945	...	...	75,962	2,97,267	34,634	77,869	328	406	6,076	31,329	IX
...	1	...	...	9,666	29,943	9,889	27,617	...	...	41,858	2,16,128	
11,854	43,048	900	238	36,556	1,21,370	2,969	8,859	...	...	657	2,610	
24,462	64,268	490	120	112,902	4,03,983	9,254	19,371	...	...	8,139	32,470	
264	1,992	203	61	50,202	2,54,549	35,357	81,832	1,420	1,974	17,715	78,234	
1,337	7,978	15	5	2,366	16,658	828	3,475	...	...	365	1,803	
77	374	2,087	494	129,666	5,63,758	20,616	52,259	756	1,144	23,278	1,21,302	
40,322	1,30,606	3,605	918	417,320	17,42,528	113,547	2,71,282	2,504	3,524	93,088	4,83,881	
...	...	...	...	7	55	...	...	...	...	13	168	X
478	3,994	...	...	6,122	34,198	603	2,591	...	...	372	3,936	
...	...	...	...	67	477	...	...	...	...	5	21	
25	253	...	...	2,348	13,050	298	1,231	...	...	328	1,726	
503	4,247	...	...	8,544	47,780	901	3,822		...	718	5,851	
7	73	...	...	187	1,492	75	395	...	...	1	15	XI
52	133	...	...	381	1,329	4,347	19,742	542	1,009	17	83	XII
37,491	73,566	...	...	1,886	11,980	11	51	...	...	48	253	XIII
693	3,326	50	15	15,898	81,917	2,872	8,852	...	...	2,412	10,424	
38,184	76,886	50	15	17,784	93,897	2,883	8,903	...	...	2,460	10,677	
581	1,852	75	23	2,060	10,160	172	727	...	...	417	3,150	XIV
...	1	...	...	10	157	16	133	...	...	35	364	XV
4	62	...	...	171	804	15	176	...	...	26	192	
4	63	...	...	181	961	31	309	...	...	62	556	
97,839	2,80,130	6,261	1,655	563,904	24,32,085	133,531	3,65,402	3,159	4,752	130,474	6,00,987	

P. T. O.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity—*contd.*	Gauge.	5' 6"				3' 3½"			
		Classification No.	9		10		12		13	
		Railway.	Nizam's Guaranteed State.		Madras.		Bengal Docars.		Dibru-Sadiya.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
	Brought forward		587,257	27,20,952	1,126,252	45,80,712	28,596	64,903	457,279	5,37,507
XVI	LIQUORS—									
	1. Ale and beer		1,238	9,672	3,159	31,447	...	...		
	2. Wines and spirits of all kinds, including country spirit		314	4,403	4,580	37,698	44	285	117	1,238
	3. All other sorts, including toddy and fermented liquor other than ale and beer		1,600	7,017	2,107	10,071	...	...		
	TOTAL		3,152	21,092	9,846	79,216	44	285	117	1,238
XVII	METALS—									
	1. Brass, unwrought		248	2,008	1,269	11,715	...	...		
	2. Brass, wrought		268	2,693	790	6,092	...	...		
	3. Copper, unwrought		64	483	136	1,424	...	...		
	4. Copper, wrought		124	1,518	143	938	...	...		
	5. Iron and steel—								2,183	26,310
	(*a*) Cast		608	5,614	1,349	12,732	20	99		
	(*b*) Unwrought		2,204	10,558	2,257	19,338	...	...		
	(*c*) Wrought		3,166	31,547	17,490	1,40,425	1,054	4,377		
	(*d*) Manufactures		1,351	14,928	9,968	1,24,614	1,166	4,833		
	6. Others		685	8,039	3,023	28,202	1,353	6,293	...	...
	TOTAL		8,718	83,388	36,425	3,76,080	3,593	15,602	2,183	26,310
XVIII	OILS—									
	1. Kerosine		6,582	47,961	26,856	2,07,860	795	2,669		
	2. Castor		417	4,008	4,336	9,971	...	...		
	3. Cocoanut		255	2,858	2,243	24,435	2	4	2,936	11,205
	4. Mustard and rape		...	17	179	1,296	30	193		
	5. Others		2,675	24,886	5,994	36,084	14	95		
	TOTAL		9,929	79,730	39,608	2,79,646	841	2,961	2,936	11,205
XIX	OIL SEEDS—									
	1. Castor		89,335	3,36,021	33,944	1,73,842	...	...	...	...
	2. Earthnuts		117	833	1,841	10,176	...	...	...	...
	3. Linseed		14,794	83,840	356	1,196	...	...	...	...
	4. Poppy		152	854	100	763	...	...	...	...
	5. Rape and mustard		148	1,305	765	4,851	153	351	...	...
	6. Til or jinjili		15,855	97,103	26,673	1,27,363	...	...	...	...
	7. Cotton seed		...	...	...	...	...	...	...	...
	8. Others		32,033	1,76,877	24,943	1,31,739	...	...	...	...
	TOTAL		122,434	6,96,833	88,622	4,49,935	153	351	...	...
XX	OPIUM		42	1,835	46	2,343	...	...	...	...
XXI	PAPER AND PASTE-BOARD		677	8,744	1,119	13,972	...	...	...	...
XXII	PROVISIONS—									
	1. Dried fruits and nuts		10,177	93,326	12,090	54,881	3	6		
	2. Ghee		1,145	13,016	3,574	36,177	...	...	226	2,133
	3. Others		6,871	35,718	79,003	5,71,451	170	629		
	TOTAL		18,193	1,42,060	94,667	6,62,509	173	635	226	2,133
XXIII	RAILWAY PLANT AND ROLLING STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS—									
	1. Locomotive engines and tenders and parts thereof		464	3,663	53	498	...	...	...	...
	2. Carriages and trucks and parts thereof		...	...	1	18	...	...	...	...
	3. Materials—									
	(*a*) Steel rails and fish-plates		42	—51	897	10,220	...	...	...	...
	(*b*) Sleepers and keys of steel and cast-iron		...	...	98	476	...	...	...	...
	(*c*) Others		589	4,761	477	4,943	1,616	1,276	...	...
	TOTAL		1,095	8,373	1,526	16,155	1,616	1,276	...	...
XXIV	SALT		38,495	2,28,201	75,723	3,51,729	2,886	5,851	436	3,530
XXV	SALTPETRE AND OTHER SALINE SUBSTANCES—									
	1. Saltpetre		198	1,453	191	1,509	...	...	...	...
	2. Other saline substances		985	7,315	8	85	81	227	...	...
	TOTAL		1,183	8,768	199	1,594	81	227	...	...
	Carried over		791,175	39,99,976	1,474,033	67,62,991	37,983	92,091	463,177	5,81,923

DIX 19—*continued.*

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

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14		15		16		17				18		Progressive No.
Assam-Bengal.		Deoghur.		Bengal and North-Western.		Rohilkund and Kumaon system.				Jodhpur-Bikaner.		
						R. & K. (*a*) & (*b*).		Powayan Light (*c*).				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
97,839	2,80,130	6,261	1,655	563,904	24,32,085	133,531	3,65,492	3,159	4,752	130,474	6,00,987	
												XVI
107	893	...	...	116	582	1,237	7,031	...	...	1	16	
167	2,498	...	...	213	2,371	182	2,345	...	...	81	619	
...	1	...	...	...	...	...	...	...	...	2	28	
274	3,392	...	...	329	2,953	1,419	9,376	...	...	84	663	
												XVII
11	103	20	6	227	1,687	106	456			5	26	
169	1,187	15	5	1,787	12,535	497	2,851			132	987	
...	5	...	...	10	59	20	123			1	11	
15	69	...	...	168	1,307	46	274			90	623	
82	597	...	...	1,255	5,915	244	1,506	206	363	38	102	
11	94	30	9	190	1,021	148	584			127	435	
1,626	9,237	220	70	6,791	34,905	2,549	13,514			1,711	9,194	
717	6,307	...	...	3,916	23,502	228	1,749			405	2,636	
836	6,793	...	...	2,101	14,718	229	1,714			214	1,509	
3,467	24,392	285	90	16,445	95,649	4,058	22,762	206	363	2,703	15,523	
												XVIII
7,270	25,439	200	60	10,876	36,692	2,082	6,199	...	...	391	1,670	
20	182	5	2	4,490	22,026	27	95	...	...	281	1,932	
74	451	5	2	318	1,649	7	56	...	...	16	49	
356	2,266	...	...	357	2,523	55	333	...	...	5	42	
92	785	100	30	282	1,725	53	461	...	...	535	2,830	
7,812	29,123	310	94	16,323	64,615	2,224	7,144	...	...	1,228	6,523	
												XIX
50	147	135	40	6,441	25,430	4,130	13,187			8	14	
4	12	...	...	...	...	...	...			3	18	
317	692	...	...	76,999	3,20,485	8,362	20,722			77	338	
1	5	...	...	4,639	21,263	1,543	2,573			10	122	
1,005	3,927	112	34	48,765	2,15,068	9,416	32,700	459	700	5,569	26,864	
1,896	6,328	...	...	955	4,274	1,945	5,237			6,782	23,764	
13	46	...	...	...	...	...	...			5,979	20,874	
83	317	...	...	5,544	21,710	239	749					
3,279	11,474	247	74	143,343	6,08,230	25,635	75,168	459	700	18,428	71,934	
24	332	...	...	4,807	70,519	155	1,794	...	...	22	284	XX
85	496	...	...	1,849	5,170	89	523	...	...	91	661	XXI
												XXII
142	821	...	...	1,260	14,149	225	1,506	...	...	2,039	8,892	
226	1,766	10	3	3,479	24,981	304	1,430	...	...	2,013	14,508	
5,659	39,047	40	11	14,345	59,072	3,223	42,934	...	...	1,313	6,190	
6,027	41,634	50	14	19,084	98,202	5,752	45,870	...	...	5,365	29,590	
												XXIII
...	...	...	...	...	...	...	...	...	...	65	320	
8	40	...	...	...	...	...	...	...	...	415	1,044	
822	1,015	...	...	...	...	11	56	...	...	8,630	36,439	
...	...	...	...	383	2,997	1	1	...	...	2,678	8,324	
2,949	2,974	...	...	...	...	2,488	8,210	...	...	2,528	5,799	
3,779	4,029	...	...	383	2,997	2,500	8,267	...	...	14,366	51,926	
8,332	26,383	600	180	119,735	4,04,151	12,038	31,308	178	265	35,172	2,01,955	XXIV
												XXV
17	85	...	...	12,571	43,157	103	247	...	...	222	1,020	
17	148	...	...	3,198	11,808	575	1,452	...	...	1,035	4,674	
34	233	...	...	15,769	54,965	678	1,699	...	...	1,257	5,694	
130,952	4,21,618	7,753	2,107	901,971	38,38,636	188,079	5,69,313	4,002	6,080	209,199	9,85,680	

P. T. O.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity—*concld.*	Gauge.	5′ 6″				3′ 3⅜″			
		Classification No.	9		10		12		13	
		Railway.	Nizam's Guaranteed State.		Madras.		Bengal Dooars.		Dibru-Sadiya.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		Brought forward	791,175	39,99,976	1,474,033	67,62,991	37,983	92,094	463,177	5,81,923
XXVI	SILK—									
	1. Raw—									
	(*a*) Foreign		4	85	17	330	...	...	...	...
	(*b*) Indian		1	30	216	4,033	...	...	...	...
	2. Piece-goods—									
	(*a*) Foreign		...	7	8	57	...	...	...	...
	(*b*) Indian		2	91	30	587	...	...	...	...
		TOTAL	7	213	271	5,007	...	...	...	...
XXVII	SPICES—									
	1. Betel-nuts		1,127	11,519	10,953	1,28,187	182	514	...	...
	2. Cardamoms		3	48	180	2,633	32	186	...	...
	3. Chillies		6,811	81,169	21,577	1,42,301	...	...	...	...
	4. Ginger		98	928	706	4,299	21	40	...	...
	5. Pepper		41	463	1,458	19,245	...	...	...	...
	6. Others		1,533	14,858	3,664	20,061	...	...	...	...
		TOTAL	9,613	1,08,985	38,538	3,16,726	235	737	...	...
XXVIII	STONE AND LIME—		12,272	43,677	76,503	1,26,907	345	590	917	3,480
XXIX	SUGAR—									
	1. Refined or crystallized, including sugarcandy		4,497	36,240	11,727	60,892	127	332		
	2. Unrefined—									
	(*a*) Sugar		1,125	8,896	4,235	26,257	74	196	354	2,812
	(*b*) *Gur, rab*, jaggery, molasses and other saccharine produce		9,781	75,398	50,932	1,93,924	252	1,017		
		TOTAL	15,403	1,20,534	66,894	2,81,073	453	1,545	354	2,812
XXX	TEA—									
	1. Foreign		20	364	44	796	...	...	7,764	61,893
	2. Indian		51	1,007	588	9,829	30,122	2,11,330		
		TOTAL	71	1,371	632	10,625	30,122	2,11,330	7,764	61,893
XXXI	TOBACCO—									
	1. Unmanufactured		2,280	30,143	19,696	1,22,504	2,509	5,018	...	...
	2. Manufactured—									
	(*a*) Cigars		104	1,613	776	19,546	...	...	...	...
	(*b*) Other sorts		32	535	1,036	15,426	...	...	...	...
		TOTAL	2,416	32,291	21,508	1,48,476	2,509	5,018	...	...
XXXII	WOOD—									
	1. Timber, unwrought		17,212	72,230	164,802	5 39,090	361	685	4,463	19,606
	2. Manufactures		1,743	14,476	7,574	39,022	1,314	5,175		
		TOTAL	18,955	86,706	172,376	5,78,112	1,675	5,860	4,463	19,606
XXXIII	WOOL—									
	1. Raw		131	1,174	1,267	13,507	...	...	...	...
	2. Manufactured—									
	(*a*) Carpets and rugs		98	1,480	396	4,281	...	...	...	...
	(*b*) Piece-goods, European		13	188	223	4,251	...	...	...	...
	(*c*) Piece-goods, Indian		186	2,470	303	3,020	...	...	...	...
	(*d*) Other sorts of manufactures		...	...	795	7,151	...	...	...	...
		TOTAL	428	5,312	2,984	32,210	...	...	...	...
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE		15,542	1,50,326	120,149	8,68,283	10,938	35,674	(*a*)28,505	(*a*)61,181
		GRAND TOTAL	865,882	45,47,391	1,973,888	91,30,410	84,260	3,52,845	505,180	7,30,895
	ANIMALS—									
	1. Horses		345	13,089			...	...	...	...
	2. Cattle		42	990	2,203	77,868	...	...	51	306
	3. Sheep, etc.		215	3,766			...	...	...	...
	4. Elephants		...	...			...	...	...	...
		TOTAL	602	17,845	2,203	77,868	...	...	51	306

(*a*) Including 18,704 tons and Rs. 11,871 of general merchandise of the Ledo and Tikak Margherita Colliery Railway of which details by commodities have not been furnished.

DIX 19—*continued.*

and the earnings therefrom during the Calendar year 1902.

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14		15		16		17				18		Progressive No.
Assam-Bengal.		Deoghur.		Bengal and North-Western.		Rohilkund and Kumaon system.				Jodhpur-Bikaner.		
						R. & K. (a) & (b).		Powayan Light (c).				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
130,952	4,21,618	7,753	2,107	901,971	38,38,636	188,079	5,69,313	4,092	6,080	209,190	9,85,680	
...	...	...	...	...	...	...	...	...	...	9	36	XXVI
37	396	...	...	17	110	...	...	...	...	...	6	
...	...	...	...	...	...	...	...	...	...	3	23	
...	1	...	...	1	1	...	...	...	...	1	13	
37	397	...	...	18	111	...	...	...	...	13	78	
1,612	11,969	30	9	2,705	20,962	158	1,397	...	...	91	725	XXVII
...	...	...	...	690	6,032	24	137	...	...	4	36	
646	3,379	...	...	4,050	31,016	377	2,557	...	...	744	6,232	
...	1	...	...	359	3,370	105	560	...	...	20	285	
38	207	...	...	453	3,693	28	249	...	...	15	120	
121	802	...	...	3,228	23,767	490	2,115	...	...	614	3,760	
2,417	16,358	30	9	11,485	88,849	1,182	7,015	...	...	1,488	11,058	
909	2,117	...	...	13,182	29,030	6,447	8,873	...	...	28,278	36,441	XXVIII
299	1,233	25	8	22,510	1,36,842	820	3,223			8,324	58,422	XXIX
1,037	4,354	...	...	8,478	56,523	5,521	13,377	899	844	4,689	27,432	
2,534	10,633	50	15	58,997	3,02,779	21,447	75,678			8,160	46,892	
3,870	16,220	75	23	89,985	4,96,144	27,788	92,278	899	844	21,173	1,32,746	
...	...	...	...	1	4	...	...	...	...	1	19	XXX
12,851	1,11,471	...	...	107	875	259	3,017	...	...	3	69	
12,851	1,11,471	...	...	108	879	259	3,017	...	...	4	88	
376	4,090	100	30	29,782	2,38,962	1,470	7,647	...	...	1,280	7,771	XXXI
12	202	10	3	87	715	30	432	...	...	63	708	
93	839	...	...	1,082	6,815	138	1,103	...	...	103	841	
681	5,131	110	33	30,951	2,46,492	1,638	9,182	...	...	1,446	9,320	
373	1,415	20	6	17,818	35,510	28,523	1,02,457	617	1,177	906	3,931	XXXII
1,569	9,562	...	...	2,799	15,388	1,220	6,415	...	...	254	1,652	
1,942	10,977	20	6	20,617	51,898	29,743	1,08,872	617	1,177	1,160	5,583	
...	8	...	...	127	1,246	272	1,859	...	...	1,682	11,300	XXXIII
...	3	...	...	653	1,489	4	56	...	...	15	175	
...	...	...	...	35	347	2	16	...	...	3	49	
10	87	...	...	178	1,708	27	241	...	...	172	1,717	
15	202	...	...	37	188	90	613	...	...	17	171	
25	300	...	...	1,030	4,978	395	2,785	...	...	1,889	13,412	
7,982	48,383	2,289	622	69,233	(a) 1,16,563	(b) 115,944	1,36,199	16,650	24,386	34,263	(c)1,36,357	XXXIV
161,666	6,32,972	10,277	2,800	1,138,580	48,73,571	371,475	9,37,334	22,078	32,487	298,904	13,30,763	
3	38	...	...	14	171	15	259	...	...	87	2,291	
29	409	...	...	31	724	4	59	...	...	9	119	
62	737	...	...	78	1,504	...	54	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	
94	1,204	...	...	123	2,399	19	372	...	...	96	2,410	

(a) Excluding Rs. 1,85,922 in respect of ferries and steam-boats which are included in other details.
(b) Including 22,841 tons of traffic booked between Rohilkund and Kumaon and Lucknow-Bareilly sections.
(c) Excluding a debit of Rs. 6,696 on account of a charge against stores adjusted through the North Western State railway.

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Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	Description of commodity.	Gauge.	3′ 3¾″							
		Classification No.	19		20		21		22	
		Railway.	Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Mahratta.		South Indian.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.		2	56	322	4,416	216	3,079	179	4,209
II	Coal and coke carried for the public and foreign railways		781	765	157	389	4,921	20,985	14,931	19,430
III	Cotton—									
	1. Raw		71	384	6,467	38,953	77,934	3,99,755	25,579	1,44,582
	2. Manufactured—									
	(a) Twist and yarn, European		...	3	20	183	2,686	32,104	2,613	28,601
	(b) Twist and yarn, Indian		22	155	676	3,863	10,455	90,727	11,958	78,264
	(c) Piece-goods, European		17	125	573	4,598	3,829	56,322	8,208	1,14,838
	(d) Piece-goods, Indian		420	3,417	1,129	8,287	4,823	68,791	3,987	39,769
	(e) Others		1	5	6	48	658	8,419	74	931
		Total	531	4,089	8,871	55,932	100,385	6,55,818	52,419	4,06,985
IV	Chemicals, excepting Saltpetre		...	...	46	583	655	9,893	72	2,403
V	Drugs—									
	1. Intoxicating, other than opium		1	12	8	111	32	538	18	196
	2. Non-Intoxicating—									
	(a) Medicinal preparations		...	...	52	571	176	2,708	279	3,206
	(b) Others		43	333	69	682	557	5,509	1,678	14,214
		Total	44	345	129	1,364	765	8,755	1,975	17,616
VI	Dyes and Tans—									
	1. Alizarine and aniline dyes		5	39	73	474	194	2,846	467	5,835
	2. Cutch		...	1	6	33	237	1,779	194	1,310
	3. Indigo		3	38	3	32	207	2,240	598	3,856
	4. Myrabolams		2	5	65	272	9,364	34,105	519	2,520
	5. Tanning barks		...	...	5	33	14,776	39,870	6,217	49,445
	6. Turmeric		81	610	213	1,137	9,362	59,297	4,510	33,925
	7. Others		27	218	174	1,152	746	9,538	1,591	14,585
		Total	118	911	539	3,133	34,886	1,49,675	14,096	1,11,476
VII	Fodder—									
	1. Oil-cake		10	40	474	2,814	7,387	33,813	30,496	1,15,869
	2. Hay, straw and grass		...	...	1,123	2,977	3,040	26,653	299	1,708
		Total	10	40	1,597	5,871	10,427	60,466	30,795	1,17,577
VIII	Fruits and vegetables, fresh		156	946	2,255	19,049	9,364	49,286	31,903	1,56,455
IX	Grain and pulse—									
	1. Gram and pulse		1,317	5,149	4,878	15,004	43,875	2,62,881	45,464	2,21,150
	2. Jawar and bajra		91	334	48,594	1,47,448	74,229	4,22,461	6,940	27,147
	3. Rice in the husk		8	21	47	129	14,299	66,337	95,650	2,66,191
	4. Rice not in the husk		887	3,853	19,482	84,372	65,433	3,68,813	109,996	3,65,065
	5. Wheat		3,407	14,430	5,998	17,554	13,693	73,499	885	3,393
	6. Wheat flour		18	89	199	1,067	4,146	33,513	1,285	7,745
	7. Others		10,918	39,666	6,985	20,284	12,141	58,360	8,385	36,921
		Total	16,646	63,542	86,183	2,85,858	227,516	12,85,864	268,605	9,27,612
X	Hides and skins—									
	1. Hides of Cattle—									
	(a) Dressed or tanned		...	...	14	78	9	60	395	3,758
	(b) Raw		48	283	173	1,496	586	3,714	1,902	13,234
	2. Skins of sheep and other animals—									
	(a)—Dressed or tanned		1	5	18	173	141	903	1,296	21,614
	(b)—Raw		116	733	183	1,207	6,426	45,261	5,215	29,140
		Total	165	1,021	388	2,954	7,162	49,958	8,808	67,746
XI	Horns		4	27	20	138	315	2,897	114	1,274
XII	Hemp (Indian) and other fibres, excluding jute		7	48	1	5	2,556	22,001	2,073	30,155
XIII	Jute—									
	1. Raw		2	20	...	1	449	1,408	39	199
	2. Gunny bags and cloth		215	1,170	1,758	5,286	8,676	59,077	10,791	46,750
		Total	217	1,190	1,758	5,287	9,125	60,485	10,830	46,949
XIV	Lac		3	17	4	24	36	183	243	1,372
XV	Leather—									
	1. Unwrought		7	52	130	824	671	6,199	6	40
	2. Wrought, excepting boots and shoes		3	26	24	239	170	1,952	57	598
		Total	10	78	154	1,063	841	8,151	63	638
		Carried over	18,699	73,075	102,424	3,77,066	408,270	23,87,502	437,106	19,31,897

and the earnings therefrom during the Calendar year 1902.

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3′ 3½″	2′ 6″								2′ 0″		TOTAL OTHER 2′ 6″ AND 2′ 0″				
											2′ 6″	2′ 0″			
23	24		25		26		28		29		27	30	31	32	
Burma.	Morvi.		Barsi Light.		Tarakeshwar-Magra.		Tezpur-Balipara.		Darjeeling-Himalayan.		R.K.L	H.A	H.S.	J.	Progressive No.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings	Quantity	Earnings	Quantity.		Earnings.		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.					
443	7,119	20	164	2	6	...	...	...	...	217	5,891					I
5	56	43	172	66	79	52	50	1,631	4,218	1,696	15,280					II
2,350	10,708	1,263	9,712	19,612	52,445	...	...	10	78	3	55					III
4,468	79,222	...	...	60	208	1	2	...	...	...	16					
246	2,535	27	157	158	374	...	...	...	...	130	4,169					
4,596	74,133	2	29	208	720	98	124	...	...	418	11,665					
251	3,249	144	899	89	272	...	...	...	...	81	2,174					
6	55	9	69	10	45	...	...	...	...	3	71					
11,917	1,69,902	1,445	10,866	20,137	54,064	99	126	10	78	655	18,150					
93	1,781	5	63	7	22	...	...	...	...	...	...					IV
...	...	108	335	...	...	...	...	...	...	...	...					V
74	1,636	16	164	2	6	...	...	11	75	41	765					
241	2,602	93	529	25	76	...	...	...	...	31	787					
315	4,238	217	1,028	27	82	...	...	11	75	72	1,552					
...	...	2	9	10	31	...	...	...	...	...	...					VI
1,750	16,777	1	7	14	33	...	...	...	...	1	32	Total shown against "All other articles of merchandise," as details by commodities have not been furnished.				
...	8	...	4	4	11	...	...	...	...	...	...					
70	762	4	16	5	12	...	...	...	...	...	...					
113	700	...	...	5	18	...	...	...	...	...	...					
2,278	14,664	6	32	128	357	...	...	...	...	4	94					
125	886	87	409	54	155	...	...	...	...	48	1,094					
4,336	33,797	100	477	220	617	...	...	...	...	53	1,220					
1,416	5,836	9	27	59	123	1,097	1,467	70	341	...	...					VII
709	2,824	352	1,220	217	311	...	...	...	...	17	364					
2,125	8,660	361	1,247	276	634	1,097	1,467	70	341	17	364					
20,542	1,48,684	33	156	52	128	28	51	...	...	117	1,632					VIII
13,309	93,824	2,565	8,013	2,582	5,489	25	18	280	1,397	430	6,275					IX
6,480	54,407	3,163	9,965	4,064	8,661	...	...	...	...	...	...					
568,151	27,86,858	11	36	76	162	3,510	2,198	...	...	10	77					
52,230	2,48,759	542	1,368	1,897	4,067	41	43	927	4,381	8,377	1,03,968					
758	3,242	1,219	4,041	2,455	5,288	...	...	...	...	2	45					
3,660	32,929	54	246	13	41	38	19	...	...	979	21,990					
3,278	26,182	446	1,396	39	89	...	...	...	...	410	5,132					
647,866	32,46,201	8,000	24,165	11,126	23,797	3,614	2,278	1,207	5,778	10,208	1,37,487					X
37	431	4	20	...	...	...	...	...	...	...	...					
1,241	12,135	34	150	9	25	9	8	...	...	253	3,216					
1	5	...	...	...	...	...	...	...	...	1	24					
32	290	41	235	87	204	...	...	...	...	3	59					
1,311	12,861	79	405	96	229	9	8	...	...	257	3,296					
32	430	6	32	4	10	...	...	...	...	3	61					XI
...	...	1	6	29	79	...	...	...	...	...	...					XII
23	230	...	4	...	...	794	850	1	7	2	43					XIII
11,034	63,383	163	565	1,127	2,631	...	...	...	...	153	2,108					
11,057	63,613	163	569	1,127	2,631	794	850	1	7	155	2,151					
917	12,856	11	47	1	2	...	...	...	...	...	...					XIV
22	383	19	153	...	1	...	...	...	...	1	16					XV
48	819	12	86	3	10	...	...	...	...	8	245					
70	1,202	31	239	3	11	...	...	...	...	9	261	...		...		
701,028	37,11,400	10,515	39,636	33,173	82,391	5,693	4,830	2,930	10,497	13,369	1,87,345	...		...		

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Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.		Gauge.	3' 3⅜"							
		Classification No.	19		20		21		22	
		Railway.	Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Mahratta.		South Indian.	
		Description of commodity—*contd.*	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		Brought forward	18,699	73,075	102,424	3,77,066	408,270	23,87,502	437,106	19,31,897
XVI	Liquors—									
	1. Ale and beer		2	30	23	151	1,481	16,640	538	5,219
	2. Wines and spirits of all kinds, including country spirit		5	46	103	1,016	2,147	18,065	2,828	21,209
	3. All other sorts, including toddy and fermented liquor other than ale and beer		...	...	...	...	4,927	23,486	480	1,982
		Total	7	76	126	1,167	8,555	58,191	3,846	28,410
XVII	Metals—									
	1. Brass, unwrought		2	7	298	1,518	183	2,176	1,096	7,654
	2. Brass, wrought		4	20	201	1,183	1,080	11,217	828	8,638
	3. Copper, unwrought		3	12	211	1,236	136	1,631	162	1,151
	4. Copper, wrought		1	7	61	482	595	5,785	70	698
	5. Iron and steel—									
	(*a*) Cast		...	...	1,601	4,651	481	3,954	534	7,590
	(*b*) Unwrought		...	...	312	1,568	4,286	25,806	2,346	13,226
	(*c*) Wrought		107	682	791	5,215	4,932	40,173	7,636	60,340
	(*d*) Manufactures		34	243	248	1,714	3,193	31,941	5,193	64,144
	6. Others		66	412	311	1,854	750	10,700	1,968	18,779
		Total	217	1,383	4,034	19,421	15,546	1,33,083	19,833	1,82,220
XVIII	Oils—									
	1. Kerosine		240	1,213	3,021	12,969	20,904	1,35,194	20,174	1,37,581
	2. Castor		3	16	140	806	376	1,803	3,114	21,344
	3. Cocoanut		2	5	107	492	2,254	13,838	1,410	7,799
	4. Mustard and rape		...	...	138	303	1	14	29	119
	5. Others		18	142	370	1,755	3,604	22,266	7,979	33,849
		Total	263	1,376	3,776	16,325	27,139	1,73,115	32,706	2,00,692
XIX	Oil seeds—									
	1. Castor		9	39	49	182	24,225	89,092	11,726	41,924
	2. Earthnuts		...	1	69	463	3,371	19,203	117,697	1,89,758
	3. Linseed		1	3	3	11	3,919	24,480	60	152
	4. Poppy		132	317	4	...	363	3,281	38	405
	5. Rape and mustard		9	27	16	68	501	3,177	1,241	6,868
	6. Til or jinjili		82	360	4,313	16,382	22,144	1,80,634	19,220	1,12,005
	7. Cotton seed		...	...	12,676	36,775	17,322	79,730	...	...
	8. Others		58	167			12,629	1,34,266	1,727	9,285
		Total	291	914	17,130	53,881	74,465	5,33,863	151,709	3,60,397
XX	Opium		83	538	8	156	4	65	...	...
XXI	Paper and paste-board		39	277	169	1,325	640	7,630	1,867	34,890
XXII	Provisions—									
	1. Dried fruits and nuts		365	1,914	1,990	9,101	23,174	1,64,070	1,132	7,267
	2. Ghee		251	1,150	1,341	10,762	3,359	26,686	1,173	9,267
	3. Others		287	1,380	4,965	26,937	15,421	91,248	28,232	1,69,550
		Total	903	4,444	8,296	48,800	41,954	2,82,004	30,537	1,86,084
XXIII	Railway plant and rolling stock carried for the public and foreign railways—									
	1. Locomotive engines and tenders and parts thereof		...	...	45	319	14	32	77	814
	2. Carriages and trucks and parts thereof		...	...	...	...	174	887	20	98
	3. Materials—									
	(*a*) Steel rails and fish-plates		...	...	...	...	42	105	1,284	2,335
	(*b*) Sleepers and keys of steel and cast-iron		...	...	...	...	11	64	1,682	3,321
	(*c*) Others		2	1	3	14	50	826	899	5,219
		Total	2	1	48	333	291	1,914	3,962	11,787
XXIV	Salt		854	3,995	3,795	6,221	50,743	4,09,778	72,397	2,67,546
XXV	Saltpetre and other saline substances—									
	1. Saltpetre		10	66	37	231	236	1,562	567	3,104
	2. Other saline substances		15	65	11	68	100	1,737	2	18
		Total	25	131	48	299	426	3,299	569	3,122
		Carried over	21,383	86,210	139,854	5,22,994	628,033	39,90,444	754,532	32,07,045

DIX 19—*continued.*

and the earnings therefrom during the Calendar year 1902.

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3′ 3⅜″	2′ 6″								2′ 0″		TOTAL OTHER 2′ 6″ AND 2′ 0″				
											2′ 6″	2′ 0″			
23	24		25		26		28		29		27	30	31	32	Progressive No.
Burma.	Morvi.		Barsi Light.		Tarakeshwar-Magra.		Tezpur-Balipara.		Darjeeling-Himalayan		R. K. L.		H.A.	H.S. J.	
Quantity.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity	Earnings	Quantity.	Earnings.	Quantity.	Earnings.			
Tons.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.			
701,028	10,515	39,636	33,173	82,391	5,693	4,830	2,930	10,497	13,369	1,87,345	...	...			
															XVI
2,673	2	11	1	5	...	...	20	133	454	2,525					
545	5	60	7	30	...	...			131	3,774					
3	9	86	...	...	...	...	...	...	1	23					
3,221	16	157	8	35	...	...	20	133	586	6,322					
															XVII
43	62	422	9	25	...	...			...	...					
188	35	249	21	61	...	...			49	1,264					
6	18	124	7	17	...	...			...	...					
74	7	43	12	32	...	...			16	258					
332	13	98	27	62	...	...	44	314	12	284					
33	45	182	4	11	...	...			...	...					
4,040	32	170	791	1,795	...	...			2	46					
6,515	103	684	136	373	...	...			784	17,217					
372	24	154	8	26	...	...			95	1,983					
11,603	339	2,126	1,015	2,402	...	...	44	314	952	21,052					
															XVIII
8,421	60	188	692	1,601					699	11,339	Total shown against "All other articles of merchandise," as details by commodities have not been furnished.				
63	25	105	4	11					5	91					
727	8	31	93	250	280	518	29	199	6	105					
6	25	96	...	...					291	4,516					
7,068	77	370	104	280					37	647					
16,285	195	790	893	2,142	280	518	29	199	1,038	16,698					
															XIX
13	2	6	244	532	...	...	...	...	...	...					
284	7	28	333	769	...	...	...	...	...	...					
...	2	7	4,793	10,213	...	...	...	...	...	10					
...	3	10	14	33	...	...	...	...	...	...					
2	13	36	11	28	189	151	...	...	5	112					
6,707	936	2,849	169	373	...	...	...	...	...	...					
...	622	1,428	...	...	...	...	...	...	1	18					
3	4	10	1,762	3,833	...	...	...	...	...	...					
7,009	1,589	4,374	7,326	15,781	189	151	...	...	6	140					
34	6	71	...	...	...	...	...	...	...	15					XX
416	94	721	57	179	2	2	...	...	74	1,893					XXI
															XXII
667	67	254	759	2,042	...	...	35	196	15	311					
789	69	292	28	82	8	5			37	762					
44,405	180	881	66	194	639	459			1,662	22,951					
45,861	316	1,427	853	2,318	647	464	35	196	1,714	24,024					
															XXIII
...	...	...	...	...	...	...	...	...	...	...					
...	...	...	...	...	...	...	...	...	...	...					
328	...	...	...	...	...	...	...	...	...	...					
...	...	...	...	...	...	...	...	...	...	...					
...	...	...	...	...	...	...	65	211	...	...					
328	...	...	...	...	...	...	65	211	...	...					
18,916	1,236	1,668	3,864	8,780	204	324	11	91	1,076	18,017					XXIV
															XXV
...	17	59	...	1	...	...	...	...	...	12					
15	2	11	46	117	...	...	...	...	...	...	...	...			
15	19	70	46	118	...	...	...	...	...	12	...	...			
804,716	14,325	51,040	47,235	1,14,146	7,015	6,289	3,134	11,641	18,815	2,75,518	...	...			

P. T. O.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.		Gauge.	3′ 3¾″							
		Classification No.	19		20		21		22	
		Railway.	Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Maharatta.		South Indian.	
		Description of commodity—*concld.*	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		Brought forward	21,383	86,210	139,854	5,22,994	628,033	39,90,444	754,532	32,07,045
XXVI	Silk—									
	1. Raw—									
	(*a*) Foreign		1	7	4	28	154	2,604	...	...
	(*b*) Indian		...	...	1	1	146	704	15	324
	2. Piece-goods—									
	(*a*) Foreign		...	...	...	...	...	...	...	...
	(*b*) Indian		...	1	3	27	...	6	8	53
		Total	1	8	8	56	300	3,314	23	377
XXVII	Spices—									
	1. Betel-nuts		3	33	502	2,595	11,505	82,376	13,597	63,603
	2. Cardamoms		...	3	2	22	117	1,586	560	4,821
	3. Chillies		33	143	268	1,725	17,612	1,01,718	7,377	70,057
	4. Ginger		9	61	8	70	266	2,453	422	3,720
	5. Pepper		1	5	6	58	492	3,239	612	6,060
	6. Others		100	483	564	3,267	6,503	50,809	491	4,046
		Total	146	728	1,350	7,737	36,495	2,42,181	23,059	1,52,307
XXVIII	Stone and lime		118	488	63,622	37,090	24,140	56,009	69,705	97,421
XXIX	Sugar—									
	1. Refined or crystallised, including sugarcandy		225	1,207	5,279	25,524	5,641	31,221	18,317	63,418
	2. Unrefined—									
	(*a*) Sugar		805	4,075	...	...	6,514	40,759	3,177	15,515
	(*b*) *Gur, rab*, jaggery, molasses and other saccharine produce		1,239	6,159	3,897	14,745	45,267	2,62,584	50,991	3,25,478
		Total	2,269	11,441	9,176	40,269	57,422	3,34,564	72,485	4,04,411
XXX	Tea—									
	1. Foreign		...	1	4	53	11	196	4	25
	2. Indian		1	10	29	235	48	778	1,605	10,013
		Total	1	11	33	288	59	974	1,609	10,038
XXXI	Tobacco—									
	1. Unmanufactured		263	1,018	1,349	5,144	10,465	69,122	6,392	38,368
	2. Manufactured—									
	(*a*) Cigars		...	1	5	66	384	3,996	1,435	20,614
	(*b*) Other sorts		72	440	141	1,405	200	3,320	2,985	9,115
		Total	335	1,459	1,495	6,615	11,049	76,438	10,812	68,097
XXXII	Wood—									
	1. Timber, unwrought		41	237	8,500	40,985	31,546	1,44,886	75,544	1,30,264
	2. Manufactures		11	72	617	4,050	4,394	30,279	5,736	43,296
		Total	52	309	9,117	45,035	35,940	1,75,165	81,280	1,73,560
XXXIII	Wool—									
	1. Raw		17	120	343	2,637	481	4,795	2,863	2,934
	2. Manufactured—									
	(*a*) Carpets and rugs		...	...	...	...	...	1	37	351
	(*b*) Piece-goods, European		1	6	1	13	...	7	2	31
	(*c*) Piece-goods, Indian		8	61	11	54	19	265	190	3,208
	(*d*) Other sorts of manufactures		...	3	2	12	835	10,395	143	536
		Total	26	190	357	2,716	1,326	15,463	3,235	7,060
XXXIV	All other articles of merchandise		1,773	9,078	7,410	34,461	72,583	2,93,328	92,717	5,60,044
		Grand Total	26,104	1,09,922	232,422	6,97,261	867,257	51,87,880	1,109,457	46,80,360
	Animals—									
	1. Horses		3	43	13	255	347	7,399	10	153
	2. Cattle		3	43	175	1,112	212	4,035	676	4,388
	3. Sheep, etc.		...	...	8	108	526	4,146	2,213	8,821
	4. Elephants		...	...	...	...	5	462	...	...
		Total	6	86	196	1,475	1,090	16,042	3,899	13,362

and the earnings therefrom during the Calendar year 1902.

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3′ 3″	2′ 6″						2′ 0″		TOTAL OTHER 2′ 6″ AND 2′ 0″.				Progressive No.
									2′ 6″		2′ 0″		
23	24		25		26	28	29		27	30	31	32	
Burma.	Morvi.		Barsi Light.		Tarakeshwar-Magra.	Tezpur-Balipara.	Darjeeling-Himalayan.		R. K.L.	H. A.	H. S.	J.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
804,716	48,85,797	14,325	51,040	47,435	1,14,146	7,015	6,289	3,134	11,641	18,815	2,75,518	...	...			
																XXVI
36	1,081	...	...	3	11	...	...	...	...	...	...					
3	42	...	...	...	1	2	2	...	...	...	...					
2	42	...	...	...	...	...	...	...	...	...	...					
1	31	...	1	...	...	...	...	...	...	...	15					
42	1,196	...	1	3	12	2	2	...	...	...	15					
																XXVII
5,193	62,703	12	49	380	1,017	...	...	...	...	32	760					
1	24	...	1	...	...	...	...	...	...	170	2,262					
5,659	1,08,221	48	268	17	48	...	...	...	...	2	25					
489	5,151	1	3	5	14	...	...	...	...	2	34					
17	345	...	1	7	24	...	...	...	...	15	360					
128	1,549	198	1,330	147	392	...	...	...	...	43	809					
11,487	1,77,993	259	1,652	556	1,495	...	...	...	...	264	4,250					
95,519	1,14,098	115	356	27	81	35	36	52	136	869	10,200					XXVIII
																XXIX
58	331	185	657	485	1,120	38	30			20	426					
3,290	33,981	7	24	33	79	...	...	6	33	666	11,401					
15,131	1,27,311	1,460	4,428	452	1,102	54	32			139	1,804					
18,479	1,61,623	1,652	5,109	970	2,301	92	62	6	33	825	13,631	Total shown against "All other articles of merchandise," as details by commodities have not been furnished.				XXX
680	11,157	1	5	...	1	...	...	...	...	...	...					
28	502	3	21	...	...	...	...	3,569	25,000	3,738	68,689					
708	11,659	4	26	...	1	...	...	3,569	25,000	3,738	68,689					
																XXXI
3,194	27,285	576	1,949	28	84	7	5	2	14	63	1,176					
120	1,414	1	7	6	20	...	...	...	...	99	2,454					
703	7,910	29	245	5	35	...	...	...	...	73	1,565					
4,017	36,609	606	2,201	39	139	7	5	2	14	235	5,195					
																XXXII
103,482	4,20,117	684	2,823	204	538	...	...	...	...	13	221					
3,537	30,088	45	324	49	152	4	12	...	...	182	2,900					
107,019	4,50,205	729	3,147	253	690	4	12	...	...	195	3,121					
																XXXIII
7	77	94	750	...	...	...	...	...	...	...	5					
31	677	...	7	...	...	...	...	...	...	1	50					
84	1,514	4	26	...	...	...	...	...	...	2	46					
18	338	2	13	...	2	...	...	...	...	12	291					
4	57	...	4	1	2	...	...	...	...	19	455					
144	2,663	100	800	1	4	...	...	...	...	34	847					
125,564	4,67,903	992	5,514	738	1,630	2,570	1,678	1,104	7,583	3,443	47,856	33,136	94,953			XXXIV
1,167,695	61,09,656	18,782	69,845	49,822	1,20,499	9,725	8,984	7,867	44,407	28,418	4,29,322	33,136	94,953			
713	26,017	16	251	...	...	...	...	...	...	...	...	...	...			
4,101	1,06,684	4	34	...	...	...	...	...	...	...	217	...	...			
1,545	36,131	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...			
6,359	1,68,232	20	285	...	...	...	...	...	...	...	217	...	...			

Appendix 20.
Train, engine and ton-mileage.

Train, engine and ton-mileage in

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to the

Gauge.	5′ 6″																
Class: No.	1	2			3	4		5	6			7			8		
		E. B. S. system.							N. W. system (*a*) to (*f*).			G. I. P. system.			B., B. & C. I. system.		
Calendar year.	E. I.	5′ 6″ gauge.	Other gauges. *	Total.	B. C.	B. N. system (*a*) & (*b*).	E. C.	O. and R. (*a*) & (*b*).	Comml. section.	Mily. section.	Total.	G. I. P. (*a*) to (*c*).	I. M. (*d*) to (*h*).*	Total.	B., B. & C. I. (*a*) to (*e*) & (*l*) & (*m*). *	R. M. (*f*) to (*k*). ¶	Total.
TRAIN-MILEAGE.—PASSENGER TRAINS.																	
1898	2,546	816	258	1,074	75	461	9	474	2,087	20	2,107	4,022	472	4,494	962	839	1,801
1899	2,576	794	273	1,067	92	494	16	589	2,052	17	2,069	4,043	§463	4,506	1,203	663	1,866
1900	2,673	820	358	1,178	47	657	86	670	2,153	27	2,180	4,018	§611	4,629	1,244	651	1,894
1901	2,627	844	385	1,229	48	1,355	†	840	2,297	29	2,326	3,908	611	4,519	1,403	651	2,054
1902	2,636	878	406	1,284	49	1,494	†	1,258	2,603	41	2,644	4,206	855	5,061	1,408	684	2,092
GOODS TRAINS.																	
1898	7,529	730	565	1,295	48	269	39	734	4,271	203	4,474	4,974	671	5,645	1,031	2,753	3,784
1899	8,123	768	727	1,495	97	538	135	1,012	3,693	237	3,930	4,993	§584	5,577	1,252	3,348	4,600
1900	9,104	804	849	1,653	124	1,451	340	1,010	2,833	307	3,140	5,024	§1,098	6,122	1,370	4,311	5,681
1901	9,494	793	838	1,631	100	916	†	1,333	4,454	405	4,859	5,303	998	6,301	837	3,508	4,345
1902	9,942	884	820	1,704	101	1,021	†	1,468	4,598	508	5,106	5,801	1,363	7,164	760	2,822	3,582
MIXED TRAINS.																	
1898	3,522	380	944	1,324	242	1,160	815	1,359	2,800	918	3,718	266	723	989	504	2,482	2,986
1899	3,662	406	986	1,392	218	1,249	1,213	1,342	2,991	947	3,938	249	§1,195	1,444	506	2,684	3,190
1900	3,902	381	994	1,375	247	1,161	1,418	1,651	3,038	971	4,009	307	§1,057	1,364	569	2,748	3,317
1901	4,161	369	1,052	1,421	222	1,408	†	1,794	3,480	1,125	4,605	644	1,246	1,890	436	2,829	3,265
1902	4,287	368	1,056	1,424	215	1,714	†	1,440	3,496	1,265	4,761	698	1,335	2,033	457	3,020	3,477
TOTAL TRAIN-MILEAGE. ††																	
1898	13,962	1,960	1,798	3,758	377	1,951	934	2,660	9,366	1,231	10,597	9,469	1,900	10,349	2,591	6,154	8,745
1899	14,810	2,007	2,039	4,046	410	2,328	1,493	3,066	8,967	1,297	10,264	9,454	2,285	11,739	3,002	6,798	9,800
1900	16,187	2,046	2,259	4,305	424	3,319	1,984	3,436	8,284	1,357	9,641	9,486	2,891	12,377	3,254	7,771	11,025
1901	16,840	2,047	2,325	4,372	375	3,741	†	4,076	10,475	1,642	12,117	9,978	2,960	12,938	2,786	7,125	9,911
1902	16,865	2,177	2,335	4,512	368	4,291	†	4,281	11,116	1,896	13,012	10,869	3,636	14,445	2,711	6,660	9,371
ENGINE-MILEAGE.—PASSENGER TRAINS.																	
1898	5,287	1,051	787	1,838	237	789	474	1,239	3,704	494	4,198	4,189	826	5,015	1,169	2,246	3,415
1899	5,481	1,056	849	1,905	255	832	630	1,428	3,767	509	4,276	4,157	974	5,131	1,456	2,206	3,662
1900	5,976	1,072	892	1,964	220	945	697	1,774	4,035	544	4,579	4,153	1,099	5,252	1,571	2,264	3,835
1901	4,681	1,212	1,437	2,649	195	2,387	†	2,170	5,239	751	5,990	4,246	1,243	5,489	1,652	2,238	3,890
1902	5,054	1,246	1,462	2,708	268	1,524	†	2,302	5,087	821	5,908	4,997	1,153	6,150	1,630	2,950	4,580
GOODS TRAINS.																	
1898	11,715	1,704	1,472	3,176	201	1,363	701	1,895	6,897	877	7,774	6,500	1,335	7,835	1,883	4,787	6,670
1899	12,695	1,786	1,724	3,510	198	1,748	1,023	2,153	6,429	929	7,358	6,611	1,658	8,269	2,035	5,563	7,598
1900	14,034	1,815	1,927	3,742	284	2,733	1,475	2,301	5,482	973	6,455	6,670	2,277	8,947	2,243	6,586	8,829
1901	16,357	1,658	1,441	3,099	272	2,786	†	2,601	6,753	1,083	7,836	7,191	2,207	9,398	1,621	5,863	7,484
1902	16,181	1,822	1,427	3,249	192	3,282	†	2,686	7,659	1,271	8,930	7,538	2,901	10,439	1,747	4,440	6,187
TOTAL ENGINE-MILEAGE.																	
1898	17,002	2,755	2,259	5,014	438	2,152	1,175	3,134	10,601	1,371	11,972	10,689	2,161	12,850	3,052	7,033	10,085
1899	18,176	2,842	2,573	5,415	453	2,581	1,653	3,581	10,196	1,438	11,634	10,768	2,632	13,400	3,491	7,769	11,260
1900	20,010	2,887	2,819	5,706	504	3,678	2,172	4,075	9,517	1,517	11,034	10,823	3,376	14,199	3,814	8,850	12,664
1901	21,038	2,870	2,878	5,748	467	4,173	†	4,771	11,992	1,835	13,827	11,437	3,450	14,887	3,273	8,101	11,374
1902	21,235	3,068	2,889	5,957	460	4,806	†	4,988	12,746	2,092	14,838	12,535	4,054	16,589	3,377	7,390	10,767
FREIGHT TON-MILEAGE.—COACHING.																	
1898	86,336	12,133	9,517	21,650	2,642	7,339	6,812	‡17,922	57,506	6,275	63,781	36,481	10,518	46,999	19,078	35,848	54,926
1899	89,279	12,990	9,686	22,676	2,719	11,790	9,449	‡18,816	56,247	6,448	62,695	42,722	11,321	54,043	24,294	37,512	61,806
1900	99,086	13,121	11,079	24,200	2,726	17,868	11,600	20,958	60,681	6,926	67,607	45,904	11,331	57,235	27,165	35,836	63,001
1901	107,060	14,162	12,106	26,268	2,942	28,460	†	25,579	65,174	7,898	73,072	65,935		65,935	‖28,676	41,360	70,036
1902	102,226	14,064	12,706	26,770	2,946	28,113	†	25,654	68,772	8,466	77,238	70,127		70,127	29,366	39,756	69,123
GOODS.																	
1898	1,729,246	130,546	68,919	199,465	7,939	147,998	51,471	‡166,520	905,824	57,728	963,552	745,359	132,613	877,972	328,510	425,658	754,168
1899	1,852,679	136,442	78,606	215,048	9,918	228,627	93,188	‡203,458	820,625	58,863	879,488	747,478	157,853	905,331	339,409	514,611	854,020
1900	2,024,307	145,604	91,628	237,232	15,920	383,691	162,050	190,291	639,665	56,510	696,175	717,241	258,413	975,654	374,854	646,018	1,020,872
1901	2,149,247	131,327	85,847	217,174	12,260	230,626	†	239,439	1,047,284	71,096	1,118,380	1,057,031		1,057,031	‖307,389	606,245	913,634
1902	2,040,472	156,920	94,046	250,966	10,916	306,812	†	244,498	1,000,860	71,561	1,072,421	1,262,128		1,262,128	274,054	531,677	806,631
TOTAL FREIGHT TON-MILEAGE.																	
1898	1,815,582	142,679	78,436	221,115	10,581	155,337	58,283	‡184,442	963,330	64,003	1,027,333	781,840	143,131	924,971	347,588	461,506	809,094
1899	1,941,958	149,432	88,292	237,724	12,637	240,417	102,637	‡222,274	876,872	65,311	942,183	790,200	169,174	959,374	363,703	552,123	915,826
1900	2,123,393	158,725	102,707	261,432	18,646	401,559	173,650	211,249	700,346	63,436	763,782	763,145	269,744	1,032,889	402,019	681,854	1,083,873
1901	2,256,307	145,489	97,953	243,442	15,202	259,086	†	265,018	1,112,459	78,994	1,191,453	1,122,966		1,122,966	‖336,065	647,605	983,670
1902	2,142,698	170,984	106,752	277,736	13,862	334,925	†	270,152	1,069,632	80,027	1,149,659	1,332,255		1,332,255	304,320	571,433	875,753
GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT)—COACHING.																	
1898	1,334,826	231,741	112,807	344,548	49,105	201,087	134,794	‡327,511	926,010	118,256	1,044,266	903,900	200,898	1,104,798	285,615	337,668	623,283
1899	1,386,190	238,047	115,630	353,677	53,905	231,010	185,437	‡354,329	961,980	123,202	1,085,182	909,418	237,787	1,147,205	361,741	345,631	707,372
1900	1,452,274	248,256	131,409	379,665	49,396	250,892	210,012	410,141	995,789	129,972	1,125,761	954,923	260,439	1,215,362	398,780	351,418	750,198
1901	1,628,808	252,207	141,244	393,451	46,800	464,912	†	491,726	1,114,483	147,049	1,261,532	1,322,051		1,322,051	‖424,951	364,568	789,519
1902	1,745,220	258,881	135,816	394,697	49,053	517,560	†	526,089	1,200,978	169,120	1,379,098	1,456,365		1,456,365	440,048	396,055	836,103
GOODS.																	
1898	3,830,560	388,523	201,676	590,199	33,889	458,133	154,007	‡492,431	2,430,814	198,249	2,638,063	1,982,700	421,811	2,404,516	778,279	962,932	1,741,211
1899	4,131,453	408,776	232,335	641,111	41,995	668,341	276,919	‡583,660	2,236,836	208,935	2,445,771	2,019,507	515,524	2,535,031	847,115	1,181,527	2,028,642
1900	4,502,940	444,683	252,523	697,206	63,618	991,849	462,514	553,353	1,702,564	207,471	1,910,035	2,055,865	759,739	2,815,624	1,003,489	1,452,285	2,455,774
1901	4,817,717	396,504	251,690	648,194	41,395	731,054	†	714,418	2,632,007	247,453	2,879,460	3,007,685		3,007,685	‖708,804	1,312,212	2,021,016
1902	4,933,975	466,992	271,764	738,666	45,203	905,855	†	757,100	2,617,369	262,479	2,879,848	3,495,487		3,495,487	632,188	1,156,578	1,788,766
TOTAL GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).																	
1898	5,165,386	620,264	314,483	934,747	82,994	659,220	288,801	‡819,942	3,365,824	316,505	3,682,329	2,886,600	622,709	3,509,309	1,063,894	1,300,600	2,364,494
1899	5,517,643	646,823	347,965	994,788	95,900	899,351	462,356	‡937,989	3,198,816	332,137	3,530,953	2,928,925	753,311	3,682,236	1,208,856	1,527,158	2,736,014
1900	5,955,214	692,939	383,932	1,076,871	113,014	1,242,741	672,526	963,494	2,698,353	337,443	3,035,796	3,010,788	1,020,198	4,030,986	1,402,269	1,803,703	3,205,972
1901	6,446,525	648,711	392,935	1,041,646	88,195	1,195,966	†	1,206,144	3,746,491	388,502	4,134,993	4,329,736		4,329,736	‖1,133,755	1,676,780	2,810,535
1902	6,679,195	725,783	407,580	1,133,363	94,346	1,423,415	†	1,284,089	3,827,347	431,599	4,258,946	4,951,852		4,951,852	1,072,236	1,552,633	2,624,869

* The freight and gross ton-mileage figures exclude the 2′ 0″ and 2′ 6″ gauge railways.
† Transferred partly to the Bengal-Nágpur railway and partly to the Madras railway from the 1st January 1901.
‡ Including the Cawnpore-Burhwal 3′ 3½″ gauge link as the figures cannot be separated.
§ Excluding the 2′ 0″ gauge figures as they cannot be separated from the totals.
‖ Including the Godhra-Rutlam-Nagda railway, as the figures cannot be separated.

DIX 20.
thousands *of miles of each railway (by systems).*
35 of Report.)
code letters used to denote railway systems.

Appendix 20.
Train, engine and ton-mileage.

9		10		3' 3½". 12	13	14	15	16	17		18	19	20	21		22	23	Total 3' 6" and 2' 0" gauge railways.	Total.	Gauge. Class: No.
N. G. S. system.		M. system.							R. & K. system.											
N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) & (e).	B. D.	D. S.	A. B.	D.	B. and N. W. **	R. and K. (a) & (b)	Power-ful Light. (z)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g).	W. I. P. (h).	S. I.	B.			Calendar year.
TRAIN-MILEAGE.—PASSENGER TRAINS.																				
91	...	930	...	3		3		395	12		6	...	88	306	25	1,244	398	88	16,620	1898
92	...	953	13	4		5		582	10		4	1	87	300	33	1,198	396	86	17,039	1899
90	...	1,023	23	3	‡‡	1	‡‡	693	12	‡‡	4	...	93	434	41	1,300	392	90	18,114	1900
89	1	1,576	25	...		7		719	18		21	...	86	656	10	943	418	162	19,701	1901
94	7	1,453	23	...		4		1,185	18		13	1	83	620		852	867	170	21,588	1902
GOODS TRAINS.																				
355	...	302	...	3	89	140		588	103	...	56	...	120	966	30	933	378	142	25,024	1898
349	...	495	32	4	94	212		718	179	...	169	3	156	2,091	63	1,110	382	172	30,672	1899
632	51	547	15	5	86	167	‡‡	701	170	...	165	18	226	1,226	43	730	583	238	34,252	1900
327	88	1,163	17	1	94	90		962	168	...	124	1	103	671	23	660	634	169	34,274	1901
381	224	1,005	32	17	85	118		1,086	189	4	98	...	80	915		726	795	179	35,935	1902
MIXED TRAINS.																				
460	...	1,320	...	30	130	320		1,358	371	...	331	46	376	2,358	...	2,128	1,860	265	25,449	1898
469	13	1,369	...	30	142	394		1,302	377	...	373	47	372	2,418	...	2,002	1,915	218	26,879	1899
539	318	1,170	...	50	141	401		1,426	381	...	386	50	364	1,770	...	1,227	2,069	101	28,827	1900
528	568	1,802	...	130	144	557	‡‡	1,728	402	68	674	50	329	1,820	57	1,661	2,116	181	31,561	1901
535	576	2,142	44	122	134	627		1,697	401	57	771	51	385	2,100		1,804	1,870	174	31,781	1902
TOTAL TRAIN-MILEAGE. †																				
948	...	2,600	...	47	219	468	15	2,459	507	...	410	46	590	2,708	55	3,489	2,955	676	71,520	1898
953	33	2,721	26	39	237	612	15	2,828	580	...	574	51	615	2,883	116	3,396	2,946	631	77,207	1899
1,310	457	2,811	38	80	227	599	15	3,067	580	...	627	66	685	3,493	84	3,354	3,418	709	84,193	1900
997	755	4,659	43	125	255	655	15	3,400	604	68	843	52	519	3,231	90	3,343	3,594	658	88,265	1901
1,010	807	4,600	99	139	249	759	15	3,968	635	61	949	52	488	3,635		3,539	3,243	664	92,587	1902
ENGINE MILEAGE—PASSENGER TRAINS.																				
225	...	1,257	...	21	43	152		1,191	171		179	34	326	861	25	1,941	1,320		30,388	1898
223	25	1,247	13	21	47	186		1,326	166		186	28	382	728	33	1,710	1,307		31,391	1899
264	139	1,311	23	33	57	204	‡‡	1,531	179	‡‡	196	23	334	1,151	41	1,829	1,344	‡‡	34,067	1900
318	315	1,573	25	...	46	564		1,729	279		352	56	312	673	37	1,973	387		35,948	1901
349	362	1,483	22	...	45	629		1,185	298		429	56	292	682		1,754	645		36,475	1902
GOODS TRAINS.																				
847	...	1,854	...	40	256	407		1,715	439	...	254	18	319	2,140	32	2,173	2,182		54,191	1898
880	...	2,034	13	30	286	534		1,999	538	...	420	30	330	2,452	90	2,204	2,264		58,859	1899
1,321	358	2,080	17	56	296	493	‡‡	2,050	532	...	461	49	412	2,858	45	1,804	2,393	‡‡	64,493	1900
846	507	2,900	19	252	312	213		2,258	466	66	487	...	254	2,952	55	1,878	4,004		68,396	1901
844	534	4,024	85	165	302	259		3,410	434	65	565	...	237	3,411		2,130	3,958		78,294	1902
TOTAL ENGINE MILEAGE.																				
1,072	...	3,111	...	61	299	559	15	2,906	610	...	433	52	645	3,001	57	4,114	3,502	586	84,594	1898
1,103	25	3,281	26	51	333	718	15	3,325	704	...	606	58	664	3,580	148	3,914	3,571	637	90,312	1899
1,485	497	3,491	40	88	353	697	15	3,581	712	...	657	72	746	3,925	86	3,623	4,137	746	98,555	1900
1,164	822	5,473	44	152	360	777	15	3,972	745	66	839	55	566	3,625	98	3,651	4,391	665	103,441	1901
1,193	896	5,476	107	165	347	888	15	4,595	782	65	995	56	529	4,093		3,834	4,604	674	109,004	1902
FREIGHT TON-MILEAGE—COACHING.																				
4,370	...	21,162	...			2,282		13,409	2,380		2,895	480	3,763	17,174	‡‡	25,133	17,968	‡‡	413,936	1898
4,443	...	18,169	...	‡‡	‡‡	3,521		15,436	2,689		3,258	554	4,305	19,901		24,203	17,922		437,762	1899
3,736	...	21,727	...			3,699	‡‡	17,362	2,813	‡‡	3,854	477	4,049	15,344		27,884	21,766	‡‡	465,992	1900
4,755	4,162	30,001	106			4,047		22,358	3,488		5,016	561	4,229	16,283		29,546	22,785		546,933	1901
5,010	4,607	33,427	493			4,281		25,193	3,519		5,249	558	3,716	17,844		32,204	21,127		558,498	1902
GOODS.																				
127,407	...	153,044	...			23,084		112,442	20,114		16,203	512	16,174	145,000	‡‡	87,103	122,264	‡‡	5,711,677	1898
121,151	...	159,429	...			33,906		149,935	25,688		31,896	1,331	17,412	167,054		92,252	125,056		6,166,917	1899
92,656	...	158,242	...	‡‡	‡‡	30,714	‡‡	156,381	24,583	‡‡	33,287	2,897	20,953	179,257		91,838	155,473	‡‡	6,646,473	1900
107,030	21,914	306,209	253			30,517		165,049	24,318		32,350	1,032	13,944	135,434	3,882	110,856	121,176		7,061,855	1901
114,280	26,917	297,438	1,237			28,350		172,119	28,629		37,271	1,585	12,199	159,002		124,577	180,252		7,173,091	1902
TOTAL FREIGHT TON-MILEAGE.																				
131,577	...	174,206	...			25,865		125,844	22,694		19,097	992	19,938	156,174	‡‡	112,236	140,252	‡‡	6,125,613	1898
125,594	...	177,598	...			37,427		165,121	28,377		35,154	1,885	21,717	177,255		116,515	142,976		6,604,679	1899
96,392	...	179,969	...	‡‡	‡‡	34,413	‡‡	153,743	27,396	‡‡	36,141	3,374	25,002	185,601		122,722	177,439	‡‡	7,313,465	1900
111,785	26,076	336,430	359			34,564		187,407	27,806		37,366	2,193	18,173	151,282	3,626	140,412	193,961		7,508,798	1901
119,890	31,524	323,910	1,630			32,641		197,321	32,148		41,520	2,125	15,045	176,846		158,781	201,389		7,732,499	1902
GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).—COACHING.																				
67,474	...	257,622	...			40,740		170,514	31,070		30,943	5,899	47,357	136,577	3,396	291,319	221,492		6,468,321	1898
67,319	...	240,721	...			47,995		197,499	32,814		33,193	5,795	50,421	140,774	5,406	259,239	235,786		6,800,273	1899
100,666	26,050	264,043	...	‡‡	‡‡	47,628	‡‡	227,635	33,536	‡‡	34,899	5,706	49,546	184,292	5,587	285,060	228,958	‡‡	7,326,232	1900
79,749	60,681	418,638	1,968			63,109		225,427	37,780		65,308	6,044	43,437	208,936	5,358	335,752	242,119		8,147,869	1901
85,359	64,567	493,953	5,480			69,957		351,634	39,526		73,674	6,025	45,693	231,507		296,024	289,708		8,958,193	1902
GOODS.																				
304,314	...	503,000	...			68,454		259,667	59,703		44,743	1,980	49,693	364,024	4,659	258,576	344,136		14,604,953	1898
310,736	...	531,185	...			107,316		338,715	65,101		84,183	4,340	52,688	424,928	15,329	278,296	347,946		15,999,887	1899
450,042	49,999	531,638	...	‡‡	‡‡	85,981	‡‡	335,886	61,902	‡‡	81,653	8,450	64,505	457,115	7,109	344,772	399,526	‡‡	17,231,541	1900
293,083	73,045	975,400	1,301			77,485		382,895	61,052		89,367	4,716	39,978	363,055	8,823	288,985	436,037		17,956,732	1901
304,029	82,731	896,681	5,476			77,691		419,289	68,039		99,031	4,391	37,538	429,523		318,097	477,667		18,764,575	1902
TOTAL GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).																				
371,788	...	760,622	...			109,194		430,181	90,773		75,686	7,879	96,050	500,601	8,055	549,895	565,628		21,073,274	1898
378,055	...	771,906	...			155,311		536,214	97,915		114,377	10,139	103,109	553,802	20,735	537,535	573,732		22,710,060	1899
550,708	75,959	792,681	...	‡‡	‡‡	133,609	‡‡	563,511	93,438	‡‡	114,552	14,166	114,051	641,407	12,696	630,832	621,584	‡‡	24,557,808	1900
372,823	133,725	1,394,038	2,869			140,594		658,332	93,832		154,668	10,736	88,115	571,092	14,185	579,707	676,756		26,104,201	1901
389,388	147,298	1,300,634	10,956			147,643		770,023	107,565		172,705	10,417	83,231	651,030		614,121	766,775		27,721,763	1902

§ Including the Godhra-Rutlam-Nagda (5' 6" gauge) railway only in the case of train and engine-mileage figures, during the years 1898 to 1900.
** Including the Cawnpore-Burhwal 3' 3½" gauge link only in the case of train and engine mileage figures.
† Includes miscellaneous train-mileage.
‡‡ Information not available.

Appendix 21.
Vehicle mileage.

APPEN

Loaded and Empty Vehicle Mileage in

(Referred to in paragraph

GAUGE.	5′ 6″																	
CLASS: No.	1			2 (*a*)			3			4 (*a*) & (*b*)						5		
RAILWAY.	EAST INDIAN.			EASTERN BENGAL STATE.			BENGAL CENTRAL.			BENGAL-NAGPUR.			EAST COAST STATE.*			OUDH AND ROHILKHAND STATE.		
Calendar year.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
COACHING.																		
HOME VEHICLE MILEAGE ON HOME LINE.																		
1898	82,243	18,588	100,831	13,845	1,433	15,278	3,082	419	3,501	10,576	3,161	13,737	6,867	1,359	8,226	17,091	4,358	21,449
1899	84,376	18,113	102,489	14,251	1,366	15,617	3,344	386	3,730	12,417	3,266	15,683	10,293	1,944	12,237	18,253	4,802	23,055
1900	85,781	19,479	105,260	14,969	1,338	16,307	3,120	391	3,511	15,347	3,449	18,796	11,643	2,380	14,023	21,370	5,490	26,860
1901	93,085	19,409	112,494	14,982	2,128	17,110	3,004	849	3,349	23,435	5,007	28,502	...	...	...	23,307	6,025	29,332
1902	94,698	21,030	115,728	15,315	2,004	17,319	2,902	516	3,418	27,748	8,268	36,016	...	...	....	25,242	6,301	31,543
FOREIGN VEHICLE MILEAGE ON HOME LINE.																		
1898	1,215	297	1,512	6	2	8	...	...	...	996	72	1,068	74	1	75	644	108	752
1899	1,388	238	1,626	8	2	10	1	...	1	863	206	1,069	206	8	214	969	135	1,104
1900	2,868	684	3,552	5	2	7	1	...	1	1,070	473	1,543	260	64	324	1,264	185	1,389
1901	1,903	738	2,641	6	2	8	...	...	...	3,260	553	3,813	....	...	...	2,532	517	3,049
1902	3,033	920	3,953	4	2	6	...	...	....	3,752	372	4,124	...	...	...	2,262	506	2,768
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.																		
1898	102,343			15,286			3,501			14,805			8,301			22,201		
1899	104,115			15,627			3,731			16,752			12,451			24,159		
1900	108,812			16,314			3,512			20,339			14,347			28,249		
1901	115,135			17,118			3,349			32,315			...			32,381		
1902	119,681			17,325			3,418			40,140			...			34,311		
HOME VEHICLE MILEAGE ON FOREIGN LINES.																		
1898	3,174			11			...			483			13			709		
1899	3,384			13			...			1,056			2			1,038		
1900	3,449			11			...			1,000			353			1,868		
1901	3,954			12			...			2,734			...			3,100		
1902	4,977			22			...			2,889			...			2,840		
GOODS.																		
HOME VEHICLE MILEAGE ON HOME LINE.																		
1898	154,782	51,652	206,434	18,536	7,291	25,827	1,052	794	1,846	14,132	7,304	21,436	5,569	2,366	7,935	22,483	8,443	30,926
1899	160,487	63,232	223,719	19,705	8,417	28,122	1,491	1,177	2,668	19,310	10,611	29,921	8,482	3,694	12,176	25,535	9,230	34,765
1900	160,359	73,571	233,930	21,345	10,032	31,377	2,484	1,738	4,222	27,069	16,441	43,510	13,013	7,436	20,449	24,832	7,760	32,592
1901	161,132	72,467	233,599	18,578	6,966	25,544	2,973	1,426	3,499	30,458	15,943	46,401	...	...	...	29,235	8,409	37,644
1902	179,396	77,790	257,186	22,478	7,643	30,121	1,763	973	2,736	34,733	16,207	50,940	...	...	...	29,639	9,138	38,777
FOREIGN VEHICLE MILEAGE ON HOME LINE.																		
1898	21,336	17,110	38,446	1,093	1,093	2,186	326	216	542	2,660	1,886	4,546	322	241	563	2,381	1,727	4,108
1899	20,668	17,685	38,353	835	835	1,670	208	146	354	6,454	4,453	10,907	1,672	1,543	3,215	3,690	2,922	6,612
1900	28,052	20,608	48,660	898	898	1,796	153	148	301	11,499	9,312	20,811	2,682	2,213	4,895	4,348	2,671	7,019
1901	35,059	19,786	54,845	918	918	1,836	242	188	430	4,127	2,783	6,910	...	...	...	6,770	3,807	10,577
1902	28,416	20,766	49,182	922	913	1,835	208	199	407	4,978	2,793	7,771	...	...	...	7,767	3,572	11,339
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.																		
1898	244,880			28,013			2,388			25,982			8,498			35,934		
1899	262,072			29,792			3,022			40,228			15,391			41,377		
1900	282,590			33,173			4,523			64,321			25,344			39,611		
1901	288,444			27,380			3,929			53,311			...			48,221		
1902	306,368			31,956			8,143			58,711			...			50,116		
HOME VEHICLE MILEAGE ON FOREIGN LINES.																		
1898	21,248			1,456			148			28,505			896			30,987		
1899	34,103			1,609			120			18,936			3,868			29,581		
1900	43,294			1,676			601			20,651			8,546			26,501		
1901	25,726			1,727			534			25,534			...			35,804		
1902	28,680			1,786			219			30,903			...			43,385		

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

thousands *of miles of each railway (by systems).*

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5' 6"															GAUGE.
6			7 (a) to (c)			7 (d) to (g)			8 (a) to (f)			9			CLASS: No.
NORTH WESTERN STATE.			GREAT INDIAN PENINSULA.			INDIAN MIDLAND.†			BOMBAY, BARODA AND CENTRAL INDIA.			NIZAM'S GUARANTEED STATE.			RAILWAY.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calendar year.
COACHING.															
HOME VEHICLE MILEAGE ON HOME LINE.															
60,565	17,169	77,734	50,890	...	50,890	12,669	...	12,669	16,881	1,686	18,567	4,668	95	4,763	1898
63,095	17,197	80,292	49,485	...	49,485	14,624	...	14,624	20,728	2,044	22,772	4,509	79	4,588	1899
64,477	16,731	81,208	53,476	...	53,476	15,103	...	15,103	23,583	2,073	25,656	6,954	107	7,061	1900
70,528	10,839	81,367	71,487	...	71,487	...	...	...	24,874	3,126	28,000	12,519	167	12,686	1901
74,413	23,157	97,570	76,098	15,884	91,982	...	...	...	25,420	3,069	28,489	12,965	196	13,161	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.															
771	131	902	3,190	135	3,325	933	446	1,379	39	14	53	116	56	172	1898
711	146	857	3,916	223	4,139	1,084	443	1,527	63	21	84	128	70	198	1899
864	192	1,056	3,256	230	3,486	1,272	511	1,783	45	13	58	119	55	174	1900
1,807	495	2,302	5,622	163	5,785	...	...	...	38	8	46	131	55	186	1901
1,345	484	1,829	6,968	320	7,288	...	...	...	53	13	66	117	49	166	1902
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.															
78,636			54,215			14,048			18,620			4,935			1898
81,149			53,624			16,151			22,856			4,786			1899
82,264			56,962			16,886			25,714			7,235			1900
83,669			77,272			...			28,046			12,872			1901
99,399			99,270			...			28,555			13,327			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.															
1,692			3,422			1,032			29			262			1898
1,698			3,521			1,218			64			236			1899
2,050			4,906			932			74			283			1900
1,824			4,926			...			64			253			1901
2,555			5,057			...			60			518			1902
GOODS.															
HOME VEHICLE MILEAGE ON HOME LINE.															
114,450	48,680	163,130	62,797	28,208	91,005	11,861	5,812	17,673	39,750	15,217	54,967	6,681	3,075	9,756	1898
108,353	41,459	149,812	67,295	26,450	93,745	13,901	7,906	21,807	43,228	16,897	60,125	7,021	3,177	10,198	1899
87,822	23,754	111,576	69,382	28,244	97,626	18,766	12,027	30,793	45,290	25,126	70,416	12,467	6,319	18,786	1900
125,118	53,396	178,514	113,483	47,903	161,386	...	...	...	35,554	10,828	46,382	11,417	5,922	17,339	1901
126,618	44,963	171,581	124,603	31,441	156,044	...	...	...	30,934	7,631	38,565	11,431	6,217	17,648	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.															
3,066	2,766	5,832	22,338	19,926	42,264	5,700	5,577	11,277	1,186	460	1,646	5,347	4,269	9,616	1898
2,934	2,745	5,679	22,086	19,097	41,183	7,126	6,154	13,280	2,671	1,124	3,795	5,343	4,123	9,466	1899
2,778	2,580	5,358	23,434	21,070	44,504	11,098	7,382	18,480	3,774	2,829	6,603	7,396	6,315	13,711	1900
2,853	2,503	5,356	24,449	19,796	44,245	...	...	...	668	603	1,271	4,810	3,163	7,973	1901
3,967	3,470	7,437	33,474	28,254	61,728	...	...	...	1,619	1,402	3,021	5,099	3,596	8,695	1902
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.															
168,962			133,269			28,950			56,613			19,372			1898
155,491			134,928			35,087			63,920			19,664			1899
116,934			142,130			49,273			77,019			32,497			1900
183,870			205,631			...			47,653			25,312			1901
179,018			217,772			...			41,586			26,343			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.															
9,419			15,491			9,622			2,919			5,337			1898
12,536			16,485			12,668			3,215			6,476			1899
7,575			19,394			11,489			3,089			7,383			1900
14,606			16,357			...			5,220			9,305			1901
12,589			15,662			...			5,716			8,512			1902

† Included with the Great Indian Peninsula railway system from 1901.

P. T. O.

Appendix 21.
Vehicle mileage.

APPEN

Loaded and Empty Vehicle Mileage in

(Referred to in paragraph

GAUGE.	5' 6"			3' 3½"					
CLASS: NO.	10			2 (*b*) to (*d*)			14		
RAILWAY.	MADRAS.			EASTERN BENGAL STATE.			ASSAM-BENGAL.		
Calendar year.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
COACHING.									
HOME VEHICLE MILEAGE ON HOME LINE.									
1898	16,387	5,811	22,198	15,306	1,628	16,934	4,129	664	4,793
1899	14,867	6,521	21,388	15,431	1,591	17,022	4,921	710	5,631
1900	16,175	6,850	23,025	16,341	1,672	18,013	4,997	806	5,803
1901	23,390	9,453	32,843	16,318	2,562	18,880	6,710	548	7,258
1902	24,439	9,280	33,719	16,199	2,319	18,518	6,759	488	7,247
FOREIGN VEHICLE MILEAGE ON HOME LINE.									
1898	457	565	1,022	...	...	...	...	...	...
1899	436	69	505	...	...	...	...	...	...
1900	184	54	238	...	...	...	...	...	...
1901	2,170	69	2,245	...	...	...	...	...	...
1902	1,912	666	2,578	2	1	3	...	...	...
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.									
1898	23,220			16,934			4,793		
1899	23,653			17,022			5,631		
1900	23,263			18,013			5,803		
1901	35,088			18,880			7,258		
1902	36,298			18,521			7,247		
HOME VEHICLE MILEAGE ON FOREIGN LINES.									
1898	1,336			...			...		
1899	1,021			347			...		
1900	1,317			554			...		
1901	3,343			417			...		
1902	4,543			332			...		
GOODS.									
HOME VEHICLE MILEAGE ON HOME LINE.									
1898	23,832	7,011	30,843	20,777	6,721	27,498	4,594	3,072	7,666
1899	24,735	7,657	32,387	23,274	7,059	30,333	9,861	3,594	13,455
1900	23,190	6,973	30,163	22,309	7,390	29,699	6,927	3,514	10,441
1901	35,539	11,658	47,198	21,776	5,161	26,937	5,317	2,723	8,040
1902	38,322	11,385	49,707	25,925	5,931	31,856	5,492	3,441	8,933
FOREIGN VEHICLE MILEAGE ON HOME LINE.									
1898	879	854	1,733	...	...	...	...	...	...
1899	1,161	1,153	2,314	...	...	...	...	...	...
1900	2,075	2,060	4,135	...	...	...	...	...	...
1901	7,013	6,871	13,884	422	421	843	...	...	...
1902	3,954	3,549	7,503	860	836	1,696	...	...	...
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.									
1898	32,576			27,498			7,666		
1899	34,701			30,333			13,455		
1900	34,598			29,699			10,441		
1901	61,072			27,780			8,040		
1902	57,210			31,552			8,933		
HOME VEHICLE MILEAGE ON FOREIGN LINES.									
1898	999			...			...		
1899	3,150			221			...		
1900	2,717			366			...		
1901	5,131			364			...		
1902	8,068			433			...		

DIX 21—*continued.*

thousands *of miles of each railway (by systems).*

35 of Report.)

3′ 3½″												GAUGE.
15			16			17			8 (*g*) to (*k*)			CLASS: No.
DEOGHUR.			BENGAL AND NORTH-WESTERN.			ROHILKUND AND KUMAON.			RAJPUTANA-MALWA.			RAILWAY.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calendar year.
COACHING.												
HOME VEHICLE MILEAGE ON HOME LINE.												
...	...	...	21,951	128	22,079	4,215	341	4,556	46,667	264	46,871	1898
...	...	...	23,930	143	24,073	4,443	332	4,775	48,773	195	48,968	1899
...	...	...	27,788	106	27,894	4,289	358	4,647	49,042	142	49,184	1900
...	...	...	32,788	2,256	35,044	4,342	1,003	5,345	55,884	187	56,071	1901
8	2	10	39,333	6,808	46,141	4,677	1,036	5,713	56,593	339	56,932	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
...	...	...	5	...	5	20	...	20	59	18	77	1898
...	...	...	...	...	...	22	...	22	623	25	648	1899
...	...	...	9	7	16	38	1	39	1,072	31	1,103	1900
...	...	...	8	6	14	42	2	44	84	26	110	1901
...	...	...	26	24	50	56	3	59	151	35	186	1902
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.												
...			22,084			4,576			46,948			1898
...			24,073			4,797			49,616			1899
...			27,910			4,686			50,287			1900
...			35,958			5,389			56,181			1901
10			46,191			5,722			57,118			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
...			950			9			144			1898
...			14			8			284			1899
...			25			4			105			1900
...			30			7			197			1901
...			43			7			265			1902
GOODS.												
HOME VEHICLE MILEAGE ON HOME LINE.												
...	...	...	21,009	10,899	31,908	4,316	2,972	7,288	84,043	25,598	109,641	1898
...	...	...	25,340	14,411	39,751	4,753	3,221	7,974	100,205	28,526	128,732	1899
...	...	...	26,221	16,159	42,380	4,429	2,840	7,269	118,445	45,138	163,583	1900
...	...	...	30,903	14,475	45,378	4,585	2,356	6,941	103,459	38,546	142,005	1901
8	...	8	33,211	12,274	45,485	4,758	2,602	7,360	89,450	31,561	121,011	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
...	...	...	159	131	290	250	207	457	2,796	962	3,758	1898
...	...	...	378	271	649	376	281	657	6,804	4,101	10,905	1899
...	...	...	450	225	675	367	177	544	6,333	4,884	11,217	1900
...	...	...	613	506	1,119	316	164	480	3,863	1,750	5,613	1901
...	...	...	897	576	1,473	359	207	566	6,894	4,396	11,290	1902
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.												
...			32,198			7,745			112,399			1898
...			40,400			8,631			140,136			1899
...			43,055			7,813			174,800			1900
...			46,497			7,421			147,618			1901
8			46,958			7,926			132,301			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
...			2,422			1,079			3,688			1898
...			7,479			2,961			6,801			1899
...			7,584			2,835			6,125			1900
...			3,876			2,171			4,768			1901
...			9,019			2,471			4,671			1902

P. T. O.

Appendix 21.
Vehicle mileage.

APPEN

Loaded and Empty Vehicle Mileage in

(Referred to in paragraph

GAUGE.	3′ 3⅜″											
CLASS: No.	18			19			20			21 (a) to (g)		
RAILWAY.	JODHPUR-BIKANER.			UDAIPUR-CHITOR.			BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.			SOUTHERN-MAHRATTA.		
Calendar year.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
COACHING.												
HOME VEHICLE MILEAGE ON HOME LINE.												
1898	3,294	17	3,311	603	1	604	5,415	936	6,351	14,771	1,706	16,477
1899	3,548	17	3,565	643	2	645	5,888	914	6,802	14,013	1,799	15,812
1900	3,664	12	3,676	675	1	676	6,043	911	6,954	19,701	2,428	22,129
1901	6,384	35	6,419	662	19	681	5,908	940	6,848	21,017	2,205	23,822
1902	8,373	36	8,409	634	29	663	5,764	918	6,622	24,615	5,123	29,738
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
1898	255	25	280	16	2	18	27	...	27	974	23	99
1899	285	21	306	19	2	21	29	...	29	74	23	97
1900	210	18	228	13	2	15	44	...	44	73	24	97
1901	296	28	324	9	8	17	...	...	...	57	24	81
1902	412	22	434	14	10	24	...	...	...	3	1	4
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.												
1898	3,591			622			6,378			16,576		
1899	3,871			666			6,831			15,969		
1900	3,904			691			6,998			22,226		
1901	6,743			698			6,848			23,903		
1902	8,843			687			6,622			29,742		
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
1898	242			29			...			43		
1899	228			34			...			73		
1900	214			25			...			74		
1901	256			26			...			74		
1902	422			75			...			2		
GOODS.												
HOME VEHICLE MILEAGE ON HOME LINE.												
1898	1,568	616	2,184	96	45	141	4,744	1,899	6,643	31,181	9,967	41,148
1899	1,796	691	2,487	112	45	157	4,908	2,326	7,234	34,065	15,243	49,308
1900	2,356	1,242	3,598	127	50	177	5,597	3,653	9,250	36,924	17,758	54,682
1901	3,636	1,924	5,560	115	39	154	3,890	1,484	5,374	30,843	12,176	43,019
1902	5,172	2,305	7,477	105	37	142	3,527	1,740	5,267	35,967	11,293	47,260
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
1898	1,832	1,473	3,305	83	53	136	40	43	83	645	515	1,160
1899	4,265	2,879	7,144	233	216	449	47	54	101	532	267	799
1900	3,377	2,201	5,638	495	469	964	44	46	90	492	277	769
1901	2,316	1,207	3,523	228	222	450	44	47	91	430	267	697
1902	2,437	1,520	3,957	211	198	409	55	62	117	336	250	586
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.												
1898	5,489			277			6,726			42,308		
1899	9,631			606			7,335			50,107		
1900	9,236			1,141			9,340			55,451		
1901	9,083			604			5,465			43,716		
1902	11,434			551			5,384			47,846		
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
1898	892			85			2			893		
1899	994			116			3			3,443		
1900	978			105			...			473		
1901	1,525			101			...			762		
1902	1,897			55			17			815		

DIX 21—*concluded.*

thousands *of miles of each railway (by systems).*

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3′ 3⅜″									Grand Total.			GAUGE.
21 (*h*)			22			23						Class: No.
West of India Portuguese.*			South Indian.			Burma.						Railway.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calendar year.
COACHING.												
Home vehicle mileage on home line.												
Information not available.			36,563	58	36,621	28,178	4,457	32,635	476,786	64,279	541,065	1898
			32,874	38	32,912	27,756	4,687	32,443	492,462	66,146	558,608	1899
			34,414	47	34,461	28,592	4,542	33,134	527,344	69,313	596,857	1900
522	...	522	34,950	39	34,989	28,627	7,978	36,605	575,323	74,331	649,654	1901
...	...	...	36,290	49	36,339	29,379	4,778	34,157	607,795	111,630	719,425	1902
Foreign vehicle mileage on home line.												
Information not available.			1	1	2	...	...	...	8,898	1,898	10,796	1898
			3	1	4	...	...	...	10,878	1,633	12,511	1899
			4	3	7	...	...	...	12,611	2,549	15,160	1900
511	...	511	2	2	4	...	...	...	18,484	2,996	21,480	1901
...	...	...	1	1	2	...	...	...	20,111	3,429	23,540	1902
Total coaching vehicle mileage on home line.												
Information not available.					36,613			32,635			551,861	1898
					32,916			32,443			571,119	1899
					34,468			33,134			612,017	1900
1,033					34,993			36,605			670,834	1901
...					36,341			34,157			742,965	1902
Home vehicle mileage on foreign lines.												
Information not available.					8			...			13,838	1898
					2			...			14,739	1899
					4			...			17,048	1900
					1			...			21,212	1901
...					5			...			24,617	1902
GOODS.												
Home vehicle mileage on home line.												
Information not available.			22,402	6,885	29,287	31,609	13,727	45,336	702,264	268,254	970,518	1898
			23,284	7,289	30,573	31,612	13,015	44,627	759,253	294,722	1,053,975	1899
			21,552	6,230	27,782	37,037	15,115	52,152	788,243	338,510	1,126,753	1900
168	49	217	23,418	7,284	30,702	38,644	14,502	53,146	829,332	335,637	1,164,969	1901
...	...	...	24,796	7,811	32,607	37,575	16,363	53,938	865,903	308,746	1,174,649	1902
Foreign vehicle mileage on home line.												
Information not available.			290	274	564	...	...	...	71,729	59,783	131,512	1898
			1,097	1,007	2,104	...	...	...	88,580	71,056	159,636	1899
			40	38	78	...	...	...	109,785	86,463	196,248	1900
474	87	561	85	81	166	...	...	...	95,700	65,170	160,870	1901
...	...	...	420	392	812	...	...	...	102,873	76,951	179,824	1902
Total goods vehicle mileage on home line.												
Information not available.					29,851			45,336			1,162,030	1898
					32,677			44,627			1,213,611	1899
					27,860			52,152			1,323,001	1900
778					30,868			53,146			1,325,839	1901
...					33,419			53,938			1,354,473	1902
Home vehicle mileage on foreign lines.												
Information not available.					559			...			136,647	1898
					462			...			165,247	1899
					300			...			171,682	1900
					235			...			153,745	1901
...					586			...			175,483	1902

* Included with Southern Mahratta railway from 1902.

Appendix 22.
Mileage earnings.

APPEN

Gross and net earnings in rupees per mile

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the

Gauge.	5′ 6″																	
Class: No.	1	2		3	4		5	6		7		8		9		10		12
Railway.	E. I.	E. B. system.		B. C.	B. N. (*a*) & (*b*).	E. C.	O. & R.	N. W. system.		G. I. P. system.		B., B. & C. I. system.		N. G. S. system.		M. system.		B. D.
Calendar year.		5′ 6″ gauge.	Other gauges.					Coml. Sec.	Mily. Sec.	G. I. P. (*a*) to (*c*).	I. M. (*d*) to (*h*).	B., B. & C. I. (*a*) to (*e*), (*l*) & (*m*).	R. M. (*f*) to (*k*).	N. G. S. (*a*)(*b*).	H. G. V. (*c*).	5′ 6″ gauge.	3′ 3¾″ gauges.	
Coaching Traffic.																		
1898 .	9,911	10,963	3,817	5,445	1,473	2,574	4,108	4,468	1,356	4,728	2,496	5,827	3,335	2,379	...	4,780	...	1,365
1899 .	9,995	11,338	3,619	5,352	1,870	2,710	4,132	4,512	1,296	5,596	2,379	7,256	3,498	2,496	394	4,221	5,258	1,482
1900 .	10,227	11,495	3,979	5,523	2,846	3,294	4,413	4,683	1,352	5,807	2,120	7,160	3,368	2,608	1,187	4,884	6,751	1,110
1901 .	11,004	11,952	3,995	5,499	3,658	†	5,059	4,979	1,489	4,821		7,423	3,933	2,683	2,011	4,547	7,743	882
1902 .	10,190	12,117	4,040	5,605	3,686	†	5,050	5,215	1,555	5,239		8,082	3,763	2,713	2,202	4,759	4,372	958
Goods Traffic.																		
1898 .	21,597	21,032	5,508	2,031	5,194	2,154	4,974	9,687	1,821	18,414	4,295	19,450	8,011	8,867	...	7,756	...	5,386
1899 .	22,699	20,621	5,812	2,436	5,529	2,611	5,619	8,936	1,546	18,250	4,674	18,616	9,835	9,647	2,097	8,063	3,816	5,569
1900 .	22,462	22,445	6,115	3,788	7,609	4,346	5,116	6,917	1,707	16,666	6,711	17,003	11,529	12,000	2,324	8,108	3,633	4,101
1901 .	23,381	21,292	5,782	3,261	4,092	†	5,846	10,266	2,010	14,126		13,707	10,411	9,268	2,792	7,170	6,489	3,146
1902 .	22,010	23,602	5,885	3,063	4,816	†	5,712	10,136	1,868	14,379		14,433	9,479	9,968	3,259	6,828	3,700	3,161
Gross earnings per mile worked.*																		
1898 .	31,942	33,553	9,445	8,197	7,436	4,941	9,901	14,459	3,261	23,387	6,947	26,700	11,544	11,493	...	12,789	...	7,020
1899 .	33,127	33,774	9,562	8,206	7,883	5,425	10,811	13,792	3,000	24,012	7,211	26,444	13,587	12,468	2,497	12,580	9,120	7,144
1900 .	33,265	35,849	10,218	9,601	10,776	7,884	10,716	11,954	3,114	22,850	8,977	24,315	15,124	14,853	3,657	13,272	10,416	5,500
1901 .	34,672	35,734	9,901	10,118	8,134	†	11,881	15,589	3,554	19,154		21,581	14,607	12,222	5,164	12,010	14,280	4,499
1902 .	32,616	37,870	10,042	9,484	8,854	†	11,836	15,580	3,468	19,610		23,104	13,485	13,240	5,845	11,968	8,117	4,482
Net earnings per mile worked.*																		
1898 .	21,685	19,567	5,400	2,944	3,636	1,221	5,334	7,784	—56	9,463	3,103	14,457	6,545	6,682	...	6,532	...	3,337
1899 .	22,187	17,250	5,546	3,181	4,102	1,907	5,898	7,160	—723	10,613	3,136	13,988	7,767	7,571	1,453	5,989	2,182	3,925
1900 .	21,540	18,847	5,847	3,965	6,406	2,352	5,206	5,684	—237	10,632	4,722	11,369	8,308	8,686	1,447	6,365	5,955	2,739
1901 .	22,506	17,301	5,332	4,629	3,824	†	6,463	8,402	—26	9,935		11,977	7,857	7,908	2,372	5,921	8,159	2,265
1902 .	20,676	19,623	5,473	4,132	4,362	†	5,757	7,234	—431	9,763		11,791	7,085	7,958	2,473	5,492	3,390	2,220

* Includes all other earnings
† Transferred partly to the Bengal-Nagpur
‡ Included with the

DIX 22.

worked of each railway (by systems).

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key to the code letters used to denote railway systems.

3′ 3⅜″													2′ 6″					2′ 0″				Gauge.
13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class: No.
				R. & K. System.																		Railway.
D. S.	A. B.	D.	B. & N. W.	R. & K.	P. L.	J. B.	U. C.	B. G. J. P.	S. M.	W. I. P.	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
Coaching Traffic.																						
1,512	2,533	5,545	2,766	2,168	...	1,341	1,501	2,100	1,379	841	4,128	4,683	2,481	869	2,169	...	1,623	6,116	7,649	3,263	443	1898
1,633	2,244	6,014	2,510	2,219	...	1,286	1,551	2,345	1,273	1,019	4,054	4,566	2,601	969	1,886	2,991	1,833	5,426	8,374	3,191	473	1899
1,782	2,245	6,456	2,755	2,283	...	1,091	1,333	2,232	1,821	1,116	4,559	4,732	2,566	1,148	2,142	3,301	1,947	5,833	8,407	3,577	464	1900
1,558	2,232	9,045	3,188	2,795	953	1,269	1,533	2,369	1,939	1,128	4,927	4,669	2,673	1,301	2,288	3,322	1,574	6,706	8,338	3,684	518	1901
1,620	2,031	5,496	3,396	2,851	1,075	1,242	1,536	2,045	2,139	‡	5,136	4,738	2,362	1,208	2,315	3,577	1,797	7,362	8,453	3,773	761	1902
Goods Traffic.																						
7,617	1,840	1,136	3,656	2,618	...	2,070	841	2,242	3,139	2,171	3,501	4,756	1,440	5,027	194	...	2,444	8,473	187	173	3,144	1898
8,732	1,566	890	3,915	3,200	...	3,256	1,725	2,437	3,478	6,707	3,817	4,557	1,768	6,125	203	66	2,599	8,382	377	179	3,184	1899
9,062	1,543	810	3,524	3,037	...	2,678	3,356	2,823	3,505	3,470	3,581	5,263	1,841	4,487	293	85	2,506	9,825	528	266	2,365	1900
9,239	1,520	972	3,744	3,243	739	1,702	1,700	1,736	3,046	3,791	4,300	5,429	1,073	6,371	347	52	2,274	8,524	726	287	2,357	1901
8,284	1,351	607	3,679	3,568	840	1,837	1,668	1,556	3,418	‡	4,202	5,653	749	5,599	361	137	2,220	9,049	776	372	2,158	1902
Gross Earnings per Mile Worked.*																						
9,563	4,492	6,701	6,719	5,385	...	3,501	2,364	4,488	4,608	3,355	7,869	9,579	3,987	6,036	2,380	...	4,287	14,796	7,848	3,662	3,628	1898
10,853	3,917	6,944	6,805	6,189	...	4,642	3,337	4,927	4,865	1,121	7,991	9,326	4,456	7,231	2,126	3,071	4,758	14,019	8,762	3,375	3,718	1899
11,371	3,897	7,236	6,602	6,046	...	3,861	4,724	5,192	5,449	4,972	8,299	10,134	4,486	5,764	2,461	3,422	4,799	15,866	8,959	3,849	3,276	1900
11,287	3,651	10,082	7,206	6,273	1,693	3,050	3,233	4,166	5,086	5,333	9,481	10,251	3,801	7,792	2,671	3,413	4,192	15,453	9,081	3,979	2,922	1901
10,284	3,528	6,213	7,410	6,698	1,916	3,164	3,230	3,709	5,660	‡	9,473	10,550	3,233	6,960	2,708	3,762	4,256	16,672	9,254	4,153	2,988	1902
Net Earnings per Mile Worked.*																						
3,271	187	1,378	3,841	2,608	....	2,081	1,009	1,855	1,375	−2,469	3,548	4,082	1,738	4,138	675	...	1,908	6,823	3,267	1,021	761	1898
5,550	782	1,394	3,604	3,089	...	2,832	1,661	2,369	1,567	1,368	3,783	3,839	1,802	2,991	392	558	1,308	5,035	3,941	986	−229	1899
5,651	838	1,549	2,753	3,110	...	2,146	2,759	2,581	1,919	1,743	4,109	4,368	1,683	1,966	674	960	1,290	7,095	4,301	1,358	−592	1900
5,474	780	3,887	4,010	3,457	508	1,350	1,369	1,781	1,503	−1,696	5,082	4,356	1,330	3,686	794	750	1,099	6,152	3,976	1,173	−147	1901
4,651	403	1,258	3,969	3,550	570	1,513	1,443	1,499	1,976	‡	5,132	4,538	1,201	2,449	798	1,054	1,082	7,560	4,640	1,607	−120	1902

except those from steam-boat.
railway and partly to the Madras railway from the 1st January 1901.
Southern Mahratta railway.

Appendix 23.
Train-mileage earnings.

APPEN

Gross and net earnings in rupees (excluding steam-boat

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to

Gauge.	5′ 6″ gauge.																	3′ 3½″		
Class: No.	1	2		3	4		5	6		7		8		9		10		12	13	14
Calendar year.	E. I.	E. B. S. system.		B. C.	B. N. (a) & (b).	E. C.	O. & R.	N. W. system.		G. I. P. system.		B., B. & C. I. system.		N. G. S. system.		M. system.		B. D.	D. S.	A. B.
		5′ 6″ gauge.	Other gauges.					Commercial Section.	Military Section.	G. I. P. (a) to (c)	I. M. (d) to (h)	B., B. & C. I. (a) to (e) & (l) & (m)	R. M. (f) to (k).	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c)	N. (d) & (e).			
Earnings from coaching traffic.																				
1898 .	3·61	2·69	2·85	2·87	1·73	2·97	3·05	3·07	2·62	1·68	2·95	3·29	2·94	3·75	...	3·26	...	2·39	3·05	4·85
1899 .	3·59	2·87	2·78	2·71	2·58	3·38	2·86	2·99	2·57	1·98	2·71	3·43	3·12	3·96	1·77	2·93	3·65	2·55	2·96	4·98
1900 .	3·62	2·87	3·15	3·25	3·62	3·81	2·74	2·99	2·56	2·12	2·37	3·58	3·11	3·50	2·61	3·16	4·90	2·01	3·22	4·80
1901 .	3·65	2·95	2·85	3·65	3·30	‡	2·64	2·39	2·39	2·35	2·36	3·56	3·41	3·44	2·69	2·94	5·28	1·81	2·56	3·84
1902 .	3·40	3·01	2·86	2·11	3·05	‡	2·49	2·75	2·12	2·32		3·60	3·16	3·25	2·65	3·25	5·19	1·98	3·19	3·25
Earnings from goods traffic.																				
1898 .	4·80	5·97	3·30	1·81	4·14	2·55	3·29	4·35	2·36	5·22	3·91	8·33	4·06	4·35	...	4·95	...	7·59	3·80	1·72
1899 .	4·79	5·79	3·30	2·19	4·26	2·38	3·42	4·30	2·11	5·14	3·96	8·28	4·21	4·69	3·21	4·73	2·89	11·27	3·93	1·52
1900 .	4·59	6·17	3·11	2·58	3·86	2·35	3·36	4·20	2·16	4·74	4·79	7·75	4·24	4·69	2·08	4·70	3·99	9·91	4·29	1·70
1901 .	4·64	5·93	3·09	2·52	3·43	‡	3·48	4·63	2·22	5·50	4·05	9·54	4·16	4·53	2·34	3·79	6·33	4·72	4·05	2·48
1902 .	4·55	6·03	3·42	1·15	3·28	‡	3·27	4·51	1·87	4·69		11·12	4·45	4·95	2·65	3·69	3·82	4·71	4·33	1·94
Gross earnings.†																				
1898 .	4·41	4·42	3·14	2·72	3·53	2·89	3·46	3·93	2·53	3·69	3·57	6·28	3·71	4·30	...	4·22	...	5·48	3·83	2·82
1899 .	4·40	4·50	3·12	2·78	3·90	2·86	3·50	3·84	2·34	3·79	3·50	6·06	3·93	4·64	2·85	4·00	3·30	6·64	3·91	2·65
1900 .	4·35	4·69	3·19	3·14	3·91	3·20	3·43	3·72	2·36	3·65	3·91	5·81	3·97	4·49	2·33	4·03	5·18	5·69	4·27	2·84
1901 .	4·33	4·61	3·02	3·75	3·54	‡	3·30	3·96	2·32	4·19	3·38	6·12	4·00	4·37	2·66	3·49	5·73	3·78	3·91	3·23
1902 .	4·16	4·77	3·20	3·58	3·31	‡	3·13	3·76	2·00	3·71		6·32	3·98	4·65	2·84	3·61	4·48	3·79	4·24	2·74
Net earnings.†																				
1898 .	2·99	2·58	1·76	0·98	1·72	0·72	1·81	2·10	*−0·04*	1·49	1·60	3·40	2·11	2·40	...	2·17	...	2·58	1·31	0·12
1899 .	2·95	2·30	2·84	1·08	2·03	1·01	1·91	2·00	*−0·56*	1·72	1·51	3·21	2·25	2·62	1·66	1·90	0·79	3·65	2·00	*0·53*
1900 .	2·82	2·47	1·82	1·30	2·32	0·95	1·66	1·77	*−0·18*	1·70	2·06	2·68	2·19	2·63	0·92	1·93	2·62	2·83	2·12	0·61
1901 .	2·81	2·27	1·67	1·72	1·67	‡	1·80	2·13	0·02	2·18	1·72	3·40	2·15	2·81	1·22	1·70	3·27	1·95	1·90	0·69
1902 .	2·64	2·47	1·74	1·56	1·63	‡	1·52	1·75	*−0·25*	1·85		3·22	2·09	2·79	1·20	1·63	1·87	1·85	2·05	0·31

* Information

† Includes all other earnings except

‡ Transferred partly to the Bengal-Nágpur railway

DIX 23.

Appendix 23.
Train-mileage earnings.

earnings) per train-mile of each railway (by systems).

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the code letters used to denote railway systems.

GAUGE.											2' 6" GAUGE.					2' 0" GAUGE.				GAUGE.
15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class : No.
		R. & K. SYSTEM.																		
D.	B. & N. W.	R. & K. (a) & (b)	Powayan. (c)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g)	W. I. P. (h)	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
EARNINGS FROM COACHING TRAFFIC.																				
...	2·26	3·52	...	2·39	2·67	2·87	2·49	1·71	2·38	3·16	2·09	0·50	}		}	8·16	}		}	1898
...	2·08	3·77	...	3·10	3·50	3·22	2·49	1·58	2·63	3·30	2·19	5·47	} *	*	} *	7·52	} *	*	} *	1899
...	2·05	3·51	...	2·59	3·79	3·04	2·51	1·38	2·78	3·82	2·16	4·82				7·78				1900
...	2·34	2·81	...	2·34	3·73	3·38	2·28	0·63	3·11	3·99	2·17	1·59	1·08	...	0·96	7·19	2·97	2·12	0·78	1901
...	1·93	5·35	...	2·29	3·52	3·19	2·42		3·24	3·67	1·95	4·78	1·14	...	1·00	1·99	3·29	2·17	0·79	1902
EARNINGS FROM GOODS TRAFFIC.																				
...	2·74	2·17	...	3·49	4·22	3·79	2·64	3·72	2 53	2·72	2·35	1·21	}		}	3·59	}		}	1898
...	2·76	2·17	...	3·77	4·70	3·91	2·60	4·10	2·50	2·62	2·36	9·40	} *	*	} *	3·34	} *	*	} *	1899
...	2·61	2·12	...	2·55	5·36	3·66	2·39	4·13	2·77	2·76	1·54	8·02				3·34				1900
...	2·81	2·79	...	2·55	4·90	3·82	2·59	2·13	3·01	2·80	2·01	7·76	0·58	...	1·39	3·40	0·26	0·17	0·43	1901
...	2·71	5·71	...	2·79	4·94	3·61	2·58		2·88	3·01	1·95	9·34	0·52	...	1·33	2·45	0·30	0·21	3·07	1902
GROSS EARNINGS.†																				
2·08	2·62	2·95	...	3·32	3·11	3·39	2·65	4·02	2·53	3·03	2·22	4·31	1·00	...	2·80	4·76	3·68	2·01	3·40	1898
2·38	2·54	3·00	...	3·63	4·12	3·65	2·63	4·91	2·61	2·99	2·30	8·73	0·92	1·64	2·88	4·34	3·51	2·10	3·29	1899
2·27	2·45	2·92	...	2·91	4·83	3·44	2·49	3·02	2·83	3·22	1·88	7·26	0·99	2·28	2·95	4·29	3·42	2·25	3·21	1900
3·18	2·67	2·91	1·16	2·66	4·30	3·62	2·51	3·00	3·15	3·30	2·15	9·50	0·97	2·31	2·57	4·19	3·24	2·29	2·41	1901
2·04	1·63	5·85	1·23	2·64	4·18	3·43	2·56		3·11	3·33	2·03	8·17	0·97	2·49	2·55	4·57	3·60	2·39	1·86	1902
NET EARNINGS.†																				
0·43	1·50	1·43	...	1·97	1·29	1·40	0·79	*—2·00*	1·14	1·28	0·97	0·81	0·28	...	0·66	2·15	1·53	0·47	0·71	1898
0·46	1·34	1·50	...	2·21	2·05	1·75	0·85	1·41	1·23	1·23	0·93	3·61	0·18	0·29	0·79	1·53	1·58	0·61	*—0·20*	1899
0·48	1·24	1·50	...	1·62	2·82	1·72	0·88	*—1·06*	1·40	1·45	0·71	2·48	0·27	0·64	0·79	1·92	1·64	0·79	*—0·58*	1900
1·23	1·49	1·60	0·35	1·13	1·82	1·56	0·74	*—0·95*	1·69	1·40	0·75	4·49	0·23	0·51	0·52	1·79	1·42	0·68	*—0·12*	1901
0·41	1·31	3·09	0·37	1·26	1·87	1·40	0·89		1·69	1·43	0·75	2·87	0·28	0·70	0·65	2·05	1·80	0·92	*—0·08*	1902

not available.

those from steam-boat.

and partly to the Madras railway from the 1st January 1901.

Appendix 24.
Working expenses.

APPEN

Working expenses in **thousands** *of rupees*

(Referred to in paragraphs

N. B.—A reference to Appendix 2 will furnish the key to

Gauge.	5′ 6″																				
Class: No.	1	2			3	4		5	6			7			8			9			10
Calendar year.	E. I.	E. B. S. system.			B. C.	B. N. (a) & (b)	E. C.	O. & R.	N. W. system.			G. I. P. system.			B., B. and C. I. system.			N. G. S. system.			M. system.
		5′ 6″ gauge.	Other gauges.	Total.					Commercial section.	Military section.	Total (a) to (k).	G. I. P. (a) to (c).	I. M. (d) to (i).	Total.	B. B. & C. I. (a) to (e) and (l) and (m).	B. M. (f) to (k).	Total.	N. G. S. (a) and (b).	H. G. V. (c).	Total.	M. (a) to (c).
Engineering.																					
1898 .	44,17	8,28	7,74	16,02	1,65	9,53	5,10	13,50	45,96	12,86	58,82	39,79	7,60	47,39	18,74	21,61	40,35	4,64	...	4,64	12,79
1899 .	54,12	13,72	7,47	21,19	1,80	12,52	6,97	13,20	37,21	17,09	54,30	40,62	9,63	50,25	21,90	29,29	51,19	4,72	...	4,72	12,03
1900 .	63,84	13,23	8,17	21,45	1,90	12,20	9,02	16,23	34,31	12,45	46,76	29,97	10,70	40,67	27,71	34,27	61,98	7,98	2,07	10,05	13,99
1901 .	65,60	10,38	8,29	18,67	1,82	17,79	†	17,01	40,14	13,97	54,11	34,54	8,49	43,03	14,51	30,34	44,85	3,29	3,38	6,67	15,91
1902 .	71,18	11,24	10,16	21,40	1,53	16,82	†	17,52	53,89	15,22	69,11	35,03	9,21	44,25	18,51	28,12	46,63	4,56	4,36	8,92	19,10
Locomotive.																					
1898 .	58,84	8,05	6,11	14,16	1,20	10,14	6,72	13,01	67,95	10,19	78,14	74,70	13,57	88,27	26,73	36,68	63,41	5,02	...	5,02	20,63
1899 .	69,51	9,10	6,53	15,63	1,50	11,97	8,99	12,69	69,77	11,31	81,08	78,27	16,77	95,04	30,47	42,79	73,26	5,43	14	5,57	24,05
1900 .	73,52	10,36	7,49	17,85	1,47	16,60	11,47	19,64	69,51	12,19	81,70	79,85	20,75	1,00,60	34,14	52,44	86,58	5,85	2,20	8,05	22,91
1901 .	75,67	13,26	9,09	22,35	1,61	19,27	†	19,87	80,93	13,65	94,58	87,59	21,20	1,08,79	29,55	49,39	78,94	5,14	3,12	8,26	35,32
1902 .	78,04	14,48	8,76	23,24	1,45	22,18	†	19,96	81,10	13,93	95,03	93,05	24,38	1,17,43	29,62	45,76	75,38	6,71	3,54	10,25	36,99
Carriage and Wagon.																					
1898 .	18,23	3,21	1,89	5,10	49	2,57	1,34	4,76	15,07	1,44	16,51	36,93	3,26	40,19	9,74	9,64	19,38	1,29	...	1,29	4,77
1899 .	19,39	4,54	1,97	6,51	46	2,80	1,77	8,14	15,32	1,63	16,95	23,72	4,40	28,12	14,05	9,96	24,01	1,15	1	1,16	4,60
1900 .	21,40	4,64	2,79	7,43	29	3,58	1,93	6,85	14,14	1,76	15,90	18,07	4,13	22,20	15,31	15,08	30,39	1,33	15	1,48	4,89
1901 .	22,20	6,15	3,43	9,58	34	5,49	†	4,66	21,71	2,25	23,96	20,49	4,89	25,38	10,00	16,76	26,76	1,32	34	1,66	7,00
1902 .	17,80	3,83	3,38	7,21	48	5,14	†	10,26	36,42	3,73	40,15	22,71	5,84	28,55	13,90	17,56	31,46	1,43	88	1,81	8,51
Traffic.																					
1898 .	39,07	10,43	5,47	15,90	1,29	5,89	3,67	8,23	26,33	4,30	30,63	29,91	5,31	35,22	10,48	17,16	27,64	2,65	...	2,65	8,71
1899 .	41,53	10,84	6,09	16,93	1,31	7,26	5,27	9,13	26,46	4,56	31,02	30,76	6,07	36,83	10,86	17,23	28,09	2,74	8	2,82	8,67
1900 .	45,61	11,12	6,63	17,75	1,50	8,03	5,76	10,16	26,26	4,69	30,95	32,25	6,99	39,24	12,19	18,84	31,03	2,81	1,09	3,90	8,87
1901 .	49,65	11,62	7,02	18,64	1,40	12,26	†	11,79	29,89	5,13	35,02	31,30	7,61	38,91	11,35	19,03	30,38	2,70	1,84	4,54	13,31
1902 .	50,92	12,81	6,62	19,43	1,52	12,98	†	12,29	32,07	5,08	37,15	33,61	8,84	42,45	11,64	17,97	29,61	2,67	2,10	4,77	12,99
General.																					
1898 .	19,29	3,76	2,71	6,41	1,33	5,84	3,18	4,36	11,85	2,49	14,34	13,41	5,08	18,49	5,61	12,27	17,88	2,67	...	2,67	5,73
1899 .	20,54	3,87	2,89	6,76	1,44	7,34	3,97	4,71	11,99	2,61	14,60	13,09	5,57	18,66	5,60	12,31	17,91	2,70	4	2,74	5,90
1900 .	22,20	3,89	3,20	7,09	1,48	8,04	4,13	5,06	12,35	2,87	15,22	14,27	5,92	20,19	5,80	10,55	16,35	2,59	85	3,44	6,18
1901 .	23,53	4,15	3,40	7,55	1,57	9,78	†	5,40	13,04	2,89	15,93	17,19	4,14	21,33	6,86	11,47	18,33	2,53	1,97	4,50	8,44
1902 .	24,20	4,46	3,45	7,91	1,63	10,49	†	5,81	13,21	3,12	16,33	16,92	4,42	21,34	7,41	11,38	18,79	2,28	2,49	4,77	9,27
Total.*																					
1898 .	1,99,16	36,34	28,11	64,45	6,57	35,15	21,15	45,44	1,71,32	31,87	2,03,19	2,03,20	37,57	2,40,77	74,59	98,97	1,73,56	17,07	...	17,07	53,66
1899 .	2,17,77	44,03	29,34	73,97	6,98	49,52	28,27	50,62	1,66,03	37,87	2,03,90	1,95,39	45,41	2,40,80	85,76	1,14,48	2,00,24	17,36	27	17,63	56,44
1900 .	2,45,69	45,92	34,39	80,31	7,83	52,62	33,93	60,04	1,61,85	34,88	1,96,73	1,85,17	53,52	2,38,69	1,00,59	1,34,81	2,35,40	21,88	6,42	28,30	59,02
1901 .	2,57,61	48,07	37,01	85,08	7,62	69,29	†	61,42	1,91,35	38,61	2,29,96	2,00,85	48,98	2,49,83	75,91	1,31,57	2,07,48	15,50	10,87	26,37	83,64
1902 .	2,68,80	50,03	39,93	89,96	7,43	72,80	†	63,81	2,23,99	41,97	2,65,96	2,12,87	55,67	2,68,54	83,83	1,25,79	2,09,62	18,73	13,20	31,93	91,09

* Includes working expenses under miscellaneous and steam
† Transferred partly to the Bengal-Nagpur railway and partly
‡ Included with the
§ Information
Note.—For working expenses per mile

DIX 24.

of each railway (by systems).

38 and 42 of Report.)

the code letters used to denote railway systems.

	3' 3½"													2' 6"					3' 0"				TOTALS.	Cause.
	12	13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32		Class: No.
TRK.						R. AND K. SYSTEM.																			
S. C. & N. (d) & (e).	B. D.	D. S.	A. B.	D.	B. & N. W.	R. & K. (a) & (b).	Powa-yan Light. (c)	J. B.	U. C.	B. G. J. P.	S. M.	W. I. P.	S. I.	B.	M. R. W.	B. L.	B. P.	B. K. L.	T. B.	D. H.	H. A.	H. S.	J.		Calendar year.
ENGINEERING.																									
...	36	2,73	6,03	5	7,89	1,67	...	1,91	29	2,93	11,67	54	9,26	12,84	39	12	8	...	18	77	28	13	24	3,13,72	1898
23	27	1,53	4,26	5	10,24	2,28	...	2,49	24	2,72	11,92	58	8,19	12,40	49	13	9	8	18	1,03	40	12	30	3,42,50	1899
...	25	1,73	4,43	4	11,05	1,98	...	1,92	28	2,55	13,41	67	9,19	13,71	42	13	9	11	17	70	28	12	49	3,61,79	1900
15	33	1,33	5,46	4	12,00	1,82	§	3,72	30	2,64	14,64	75	8,79	13,49	41	11	9	12	15	1,03	31	14	12	3,55,93	1901
55	45	1,67	5,37	4	12,42	2,35	13	3,45	31	2,45	13,98	‡	10,55	17,01	32	11	9	11	15	1,03	33	12	23	3,89,67	1902
LOCOMOTIVE.																									
...	26	94	2,02	10	5,82	1,51	...	1,03	25	3,45	15,37	83	17,63	18,83	75	23	12	...	13	1,36	23	9	16	4,29,55	1898
30	26	1,05	2,61	8	8,26	1,76	...	3,02	33	3,54	16,50	1,03	17,80	18,20	88	18	14	7	14	1,39	31	11	19	4,71,44	1899
55	37	1,09	2,55	11	9,03	1,66	...	3,64	49	3,81	18,86	94	16,44	22,73	1,20	12	15	10	15	1,50	37	8	17	5,26,50	1900
66	75	1,23	3,15	16	9,66	1,97	§	4,71	39	3,16	17,91	99	19,08	26,43	1,00	17	14	11	15	1,45	46	13	41	5,59,13	1901
1,24	63	1,32	3,87	10	11,20	2,28	15	5,24	34	2,78	21,21	‡	17,88	27,16	78	16	15	12	14	1,45	33	10	27	5,78,85	1902
CARRIAGE AND WAGON.																									
...	5	47	45	3	1,45	50	...	25	3	66	4,28	16	5,27	4,29	15	4	2	...	5	44	9	4	5	1,33,39	1898
2	7	49	52	5	1,93	62	...	35	11	66	4,82	19	4,88	4,15	17	5	4	2	7	51	10	3	22	1,33,98	1899
3	7	53	62	4	2,58	65	...	45	4	73	5,28	21	5,17	5,40	17	3	3	5	7	65	9	2	6	1,39,31	1900
3	17	51	92	1	2,63	78	§	53	15	72	6,66	21	6,21	6,10	16	3	6	3	5	54	9	3	6	1,51,90	1901
16	16	49	102	1	2,56	73	4	90	15	48	5,60	‡	5,65	6,09	14	3	6	3	6	44	9	2	10	1,76,38	1902
TRAFFIC.																									
...	30	52	1,64	6	4,91	1,26	...	71	13	2,16	8,31	49	8,27	9,66	42	23	18	...	15	58	31	18	19	2,19,56	1898
4	31	57	2,08	5	5,63	1,33	...	88	18	2,16	8,48	58	7,85	9,14	42	17	16	16	16	68	45	20	19	2,30,68	1899
10	36	62	2,32	6	6,77	1,33	...	1,01	21	2,25	9,21	57	7,85	10,22	47	15	16	20	16	69	47	20	19	2,49,27	1900
11	45	70	2,93	6	8,23	1,47	§	1,22	20	1,89	8,95	57	7,59	11,11	38	17	16	21	17	61	44	20	16	2,53,92	1901
33	42	65	2,98	6	8,69	1,57	9	1,84	20	1,93	9,25	‡	7,99	11,30	32	16	16	22	16	69	42	19	17	2,70,70	1902
GENERAL.																									
...	29	80	2,27	3	4,04	1,46	...	43	13	2,13	8,97	91	6,39	6,86	38	39	13	...	13	75	19	11	11	1,36,42	1898
2	25	81	3,32	2	4,56	1,51	...	57	13	2,09	8,15	96	6,30	6,86	45	38	12	5	13	82	13	6	12	1,42,38	1899
4	24	88	3,10	2	5,10	1,48	...	59	16	1,95	7,99	96	6,68	6,86	33	37	12	7	13	73	12	5	11	1,47,43	1900
4	55	82	3,71	3	5,67	1,67	§	92	17	2,03	8,46	96	6,79	7,49	34	36	13	7	15	86	15	5	12	1,57,95	1901
19	63	81	4,31	3	5,73	1,59	11	1,14	16	2,00	9,05	‡	7,10	7,95	32	43	13	7	12	88	14	6	12	1,63,70	1902
TOTAL.*																									
...	1,54	5,50	12,64	25	28,09	7,72	...	5,51	82	11,76	50,31	3,31	49,27	52,03	2,12	1,06	53	...	66	4,07	1,11	55	76	12,96,68	1898
64	1,55	4,51	12,97	27	36,32	8,69	...	8,12	1,06	11,64	51,43	4,08	46,95	52,47	2,50	91	54	38	69	4,58	1,36	52	1,02	13,93,36	1899
75	1,55	4,96	13,46	28	39,58	8,15	...	8,09	1,32	11,98	56,29	4,00	46,66	61,35	2,64	82	56	50	70	4,47	1,33	49	1,02	15,09,31	1900
1,03	2,42	5,14	16,78	30	43,34	7,89	47	12,44	1,28	10,86	67,15	4,17	49,29	68,06	2,33	89	58	54	67	4,74	1,46	55	87	15,72,45	1901
2,59	2,69	4,98	18,42	24	47,94	8,76	53	13,06	1,20	10,02	60,65	‡	50,97	72,30	1,92	97	59	55	63	4,72	1,32	50	90	16,70,49	1902

boat, direct charges and contribution to Provident Fund.
to the Madras railway from the 1st January 1901.
Southern Mahratta railway.
not available.
and per train-mile, see Appendices 26 and 27.

Appendix 25.
Proportion of expenses to earnings.

APPEN

Proportion per cent. of working expenses

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the key to

Gauge.	5′ 6″																				
Class: No.	1	2			3	4		5	6			7			8			9		10	
Calendar year.	E. I.	E. B. S. system.			B. C.	B. N. System.	E. C.	O. & R.	N. W. system.			G. I. P. system.			G. B. & C. I. system.			N. G. S. system.		M. system.	
		5′ 6″ gauge.	Other gauges.	Total.		B. N. (a) & (b)			Commercial section.	Military section.	Total.	G. I. P. (a) to (c).	I. M. (d) to (h).	Total.	B. B. & C. I. (a) to (e), & (l) & (m)	R. M. (f) to (k).	Total.	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	N. (d) & (e).
Engineering Department.																					
1898 . .	7·16	9·53	12·66	10·83	16·08	13·86	18·45	12·69	12·48	40·88	14·71	11·41	11·21	11·39	11·52	9·45	10·31	11·38	...	11·66	...
1899 . .	8·26	15·16	11·08	13·42	15·82	13·80	16·05	11·85	10·78	55·71	14·46	11·84	12·06	11·47	12·03	10·96	11·39	10 67	...	11·17	27·43
1900 . .	9·39	13·80	10·37	12 26	14·22	9·40	14·91	13·90	11·12	38·40	13·71	8·65	9·46	8·85	14·67	11·46	12·70	15·16	19·43	12·34	...
1901 . .	8·98	10·99	10·84	10·92	12·96	13·60	†	12·63	9·68	36·59	11·95	8·26	8·49	8·34	8·51	10·66	9·85	7·54	16·82	9·78	6·28
1902 . .	10·11	10·82	12·57	11·59	11·65	11·82	†	13·05	12·89	41·04	15·19	8·26	8·40	8·29	10·81	10·61	10·69	9·71	19·08	11·50	12·31
Locomotive.																					
1898 . .	9·53	9·28	10·00	9·53	11·73	14·74	24·30	13·21	18·45	32·37	19·55	21·42	20·01	21·19	16·43	16·06	16·21	12 32	...	18·81	...
1899 . .	9·70	10·05	9·68	9·89	13·19	12·20	20·72	11·40	20·23	36·85	21·59	21·86	21·00	21·70	16·73	16·01	16 31	12·29	21·76	22·32	35·23
1900 . .	10·40	10·77	9·51	10·20	11·01	12·80	18·97	16·32	22·53	37·60	23·97	23·06	18·34	21·88	18·07	17·53	17·74	11·10	20·69	20·21	27·43
1901 . .	10·36	14 03	11·29	13·08	11·49	14·74	†	14·75	19·51	35·77	20·88	20·95	21·19	20·93	17·32	17·35	17·34	11·80	15·54	21·71	27·41
1902 . .	11·08	13·94	10·84	12·59	11·00	15·60	†	14·87	19·40	37·50	20·88	21·98	22·24	21·99	17·30	17·27	17·28	14·29	15·47	22·28	28·02
Carriage and Wagon.																					
1898 . .	2·95	3·70	3·08	3·44	4·81	3·74	4 83	4·83	4·09	4·57	4·13	10·59	4·81	9·64	5·99	4·22	4·95	3·15	...	4·35	...
1899 . .	2·96	5·01	2·92	4·12	4·05	3·08	4·09	7·31	4·44	5·30	4·51	6·62	5·51	6·42	7·72	3·73	5·35	2·59	1·16	4·27	2·57
1900 . .	3·22	4·83	3·53	4·25	2·14	2·76	3·19	5·86	4·58	5·43	4·66	5·22	3·65	4·92	8·10	5·04	6·23	2·52	1·39	4·30	1·75
1901 . .	3·04	6·51	4·49	5·61	2·42	4·20	†	3·46	5·24	5·90	5·29	4·90	4·89	4·96	5·86	5·89	5·88	3·03	1·68	4·39	1·37
1902 . .	2·53	3·68	4·18	3·90	3·63	3·61	†	7·65	8·72	10·05	8·82	5·35	5·33	5·35	8·12	6 62	7·21	3·05	1·64	5·13	3 72
Traffic.																					
1898 . .	6·33	12·01	8·96	10·76	12·59	8·56	13·27	8·36	7·15	13·67	7·66	8·57	7·83	8·45	6·44	7·51	7·07	6·51	...	7·94	...
1899 . .	6·34	11·97	9·03	10·72	11·18	8·01	12·14	8·19	7·67	14·85	8·26	8·59	7·60	8·41	5·96	6·45	6·25	6·21	t1·91	8·05	5·28
1900 . .	6·46	11·57	8·41	10 15	11·29	6·88	9·52	8·71	8·51	14·48	9·08	9·31	6·18	8·54	6·45	6·30	6·36	5 32	10·28	7·82	4·86
1901 . .	6·79	12·30	9·18	10·91	9·99	9·38	†	8·75	7·21	13·42	7·73	7·43	7·61	7·59	6·65	6·68	6·67	6·20	9·13	8·18	4·43
1902 . .	7·23	12·34	8·19	10·53	11·51	9·13	†	9·16	7·67	13·71	8·17	7·92	8·07	7·95	6·80	6·78	6·79	5·69	9·16	7·82	7·42
General.																					
1898 . .	3·13	4·26	4·43	4·34	12·96	8·49	11·50	4·42	3·22	7·90	3·59	3·84	7·49	4·44	3·45	5·37	4·57	6·55	...	5·23	...
1899 . .	3·14	4·28	4·29	4·27	12·66	8 09	9·15	4·23	3·47	8·59	3·89	3·36	6 97	4·26	3·08	4·61	3·98	6·10	6·98	5·48	1·82
1900 . .	3·14	4·05	4·07	4·00	11·12	6·20	6·83	4·34	4·00	8 87	4·47	4·12	5·23	4·38	3·07	3·77	3·49	4 90	8·05	5·46	1·92
1901 . .	3·22	4·39	4·45	4·42	11·16	7·48	†	4·01	3·15	7·57	3·52	4·11	4·14	4·13	4·02	4·03	4·03	5·81	9·83	5·18	1·57
1902 . .	3·44	4·29	4 27	4·28	12·37	7·38	†	4·33	3·16	8·42	3·59	3 99	4·03	4·00	4·33	4·29	4 31	4·85	10·87	5·59	4 37
Proportion of total working expenses§ to gross earnings.																					
1898 . .	32·21	41·86	46·01	43·57	64·08	51·10	76·46	46·12	46·52	101·26	50·83	55·26	55·39	57·79	45·31	43·31	44·37	41·87	...	48·92	...
1899 . .	33·18	49·30	43·50	46·82	61·23	47·96	65·11	45·45	48·14	123·42	54·29	54·56	56·85	54·98	46 59	42·83	44 57	39·28	41 81	52·39	76·70
1900 . .	34·78	47·75	43·66	45 92	58·70	40·56	56·10	51·42	52·47	107·60	57·71	52·47	47·26	51·94	53·58	45·40	48·51	41·52	60·41	52·04	42·83
1901 . .	35·27	50·89	48·40	49·84	54·25	52·98	†	45·60	46·14	101·15	50·78	48·13	48·97	48·21	44·50	46·21	45·57	35·59	54·07	51·40	42 87
1902 . .	36·74	48·18	49·41	48 72	56·43	51·20	†	51·28	53·59	113·16	58·45	50·17	50·78	50·30	48·96	47·46	48 05	39·89	57·69	54·86	58·23

* Excluding the Parlakimedi Light railway.

† Transferred partly to the Bengal-Nagpur and partly to the Madras railways.

DIX 25.

to gross earnings of each railway (by systems.)

Appendix 25.
Proportion of expenses to earnings.

38 and 42 of Report.)

the code letters used to denote railway systems.

3' 3⅜"													2' 6"					2' 0"				Gauge.
12	13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class : No.
B.D.	D.S.	A.B.	D.	B. & N. W.	B. & K. SYSTEM. R. & K. (a) & (b)	B. & K. SYSTEM. P. W. L. (c)	J.B.	U.C.	B.G. J.P.	S.M.	W. I. P.	S.I.	B.	M. R.W.	B.L.	B.P.	R.K. L.	T.B.	D.H.	H.A.	H.S.	J.	Calendar year.
ENGINEERING DEPARTMENT.																							
13·54	32·67	46·09	14·86	12·18	12·51	...	14·07	19·96	14·64	16·56	24·38	10·56	14 28	10·38	9·16	11·22	...	21·39	10·20	14·76	17·08	24·71	1898
9·87	16·64	26·29	14·89	13·18	13·13	...	11·32	11·18	12·14	15·71	10·19	9·32	14·05	11·63	7·48	13·99	16·96	18·47	14·39	15·84	16·60	31·38	1899
7·06	17·88	25·90	11·89	13·73	11·69	...	10·52	8·29	10·80	15·44	20·09	9·97	12·43	10·02	10·07	11·38	15·23	17·98	8·61	10·97	15·47	56·32	1900
6·76	18·31	25·56	7·78	12·35	10·33	‡	16·61	31·65	13·91	18·04	20·42	8·35	13·03	11·51	6 74	11·30	16·98	17·83	13·51	11·89	18·05	14·09	1901
8·57	18·33	25·63	11·77	12·23	12·60	16·25	13·77	14·19	14·56	15·00	‖	9·38	13·61	10·38	7 66	10·61	14·00	17·52	12·15	12·55	15·19	26·72	1902
LOCOMOTIVE.																							
9·49	11·25	15·42	29·77	8·98	10·08	...	14·19	17·20	17·22	21·44	37·57	20 12	18·71	19·81	17·84	16·06	...	15·46	18·05	12·27	12·13	17·15	1898
9·39	11·44	16·13	25·18	10·62	10·14	...	14 47	15·49	15·89	21·74	18·04	20·25	20·63	20 84	11·48	20·44	14·97	14·45	19·38	12·26	14·33	19·33	1899
10·72	11·25	14·92	32·55	11·22	9·79	...	20·02	15·54	16·11	21·71	28·09	17·85	20 61	28·44	9·07	19·15	15·21	15·86	18·52	14·46	13·00	19·22	1900
15·32	12·35	14·76	32·56	10·15	11·23	‡	21·03	17·74	16·68	22·07	26·86	18·13	22·24	27·81	10·28	16·57	16·28	17·83	18·46	17·54	16·33	49·29	1901
12·02	14·52	18·48	33·53	11·03	12·23	20·05	20 95	15·68	16·53	22 77.	‖	16·24	21·72	25·67	10·95	17·78	16·23	16 85	17·02	12·29	12·40	31·41	1902
CARRIAGE AND WAGON.																							
1·92	5·57	3·40	8·18	2·25	3·68	...	1·80	2·24	3·28	5·98	7·32	6·02	4·77	4·07	3·82	3·81	...	5·58	5 87	4·73	4·73	5·12	1898
2·42	5·35	3·20	15·34	2 48	3·57	...	1·68	5·08	2·95	6 25	3·35	5·55	4·71	4·07	3·34	5 43	4·53	8·00	7·44	3·84	4·26	22·43	1899
2·05	5·46	3·60	10·61	3·21	3·85	...	2·48	1·32	3·08	6·07	6·39	5·62	4·89	4·03	2·50	4·25	3·65	7·36	3·09	3·54	2 90	7·87	1900
3·56	5·11	4·33	2·10	2·70	4·41	‡	2·35	6·67	3·80	6 97	5·69	5·14	5·13	4·53	1·81	6 25	4 79	5·44	6·95	3·64	3·47	7 30	1901
2·96	5·40	4·86	3·34	2·52	3·94	5·61	3·61	6·77	2·84	6·01	‖	5·13	4 87	4 62	2·25	6·69	3·72	7·03	5·16	3·30	2 90	11·85	1902
TRAFFIC.																							
11·02	6·18	12·53	17·60	7·59	8·40	...	5·21	8·75	10·77	11·58	22·86	9·44	10·75	11·07	17 64	23 78	...	17 73	7 70	16·40	23·24	19·64	1898
11·19	6·20	12·82	16·31	7·21	7·65	...	4·09	8·48	9·62	11·11	10·07	8·93	10·35	10·02	10·62	24·18	34·63	16·46	9·45	17·89	27·94	19 52	1899
10·11	6·44	13·58	15 96	8·42	7·89	...	5·55	6·76	9·51	10·60	17·24	8·52	9·27	11·16	12·59	20·84	28·22	16·99	8·56	18·34	26·13	21·95	1900
9·15	6·98	13 73	13 25	8·47	8·35	‡	5·69	9·06	9·93	11·03	15·49	7·22	9·35	10·66	10·06	19·39	30·05	19 77	7·70	16·93	25 33	19·10	1901
7·98	7·11	14·24	20 56	8·28	8·43	12·28	6·57	9·23	11·46	9·94	‖	7·26	9·04	10·58	10·89	19·32	28·93	18·40	8·17	15·86	23 40	19·81	1902
GENERAL.																							
10·78	9·60	17·38	7·84	6·24	9·74	...	3·21	8·79	10·61	12·52	41·29	7·29	7·63	10·00	30·05	17·01	...	14·77	9·89	10 20	15·01	11·50	1898
9·03	8·73	20·48	7·07	5·85	8·67	...	2·74	6·37	9·33	10·74	16·72	7·16	7·77	10·60	24·59	18·18	10·75	13·86	11·47	5·17	7·44	12·54	1899
7·05	8·59	18·14	6·74	6·39	8·76	...	3·28	5·54	8·61	9 20	28·73	7·25	6 22	7·71	29·63	15·66	9·62	13·83	9·01	4·67	7·20	12·35	1900
11·24	8·20	20·22	5·75	5 73	9·51	‡	4·13	7·78	10·73	10·43	26·73	6·45	6·30	9·50	22·74	15·82	9·71	17·53	10·87	5·87	7·19	14·48	1901
15·83	8·89	20·10	9·34	5·63	8·52	14·35	4·57	7·26	11·85	9·71	‖	6·45	6·36	10·63	28·57	15·18	8·81	14·73	10·35	5·46	7·06	13·86	1902
PROPORTION OF TOTAL WORKING EXPENSES§ TO GROSS EARNINGS.																							
57·40	65·79	95·83	79·43	43·37	51·58	...	40·55	57·33	58·67	70 17	149·87	54·91	57 87	56·41	81·15	71·64	...	76·19	53·89	58·36	72·12	79·02	1898
56·68	48 86	80·08	79·93	46 67	50·09	...	38·99	50 21	51 92	67·73	71 24	52·66	59·45	59·56	58·63	81·57	81·84	72 51	64·08	55·02	70 77	106·16	1899
44·42	49·96	78·69	78·86	49·21	47·97	...	44·39	41·59	50·26	64 28	129·04	50·49	55·62	62·49	65·89	72·63	71·95	73·12	55·28	51·99	64·71	113·07	1900
49·65	51·50	78·60	61·45	44·59	44·90	70·0	55·59	57·64	57·26	70·45	113·20	46·40	58 02	65·00	52 69	70·23	78·03	79·84	60·18	56·21	70·52	105·01	1901
51·09	54·77	87·86	79·75	46·35	47 00	70·24	52·18	55·31	59·49	65·09	‖	45·82	57·33	62·85	64·81	70·52	71·97	74·53	55·54	49·86	61·63	104·22	1902

‡ Information not available. § Including special and miscellaneous and steam-boat expenses. ‖ Included with the Southern Mahratta railway.

Appendix 26
Mileage expenses.

APPEN

Working expenses in rupees per mean mile

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

Gauge.	5' 6"																			
Class: No.	1	2		3	4		5	6			7		8		9		10		12	13
		E. B. system.						N. W. system.			G. I. P. system.		B., B. & C. I. system.		N. G. S. system.		Madras system.			
Calendar year.	E. I.	5' 6" gauge.	Other gauges	B. C.	B. N. (a) & (b)	E. C.	O. & R.	Com. sec.	Mily sec.	Total.	G. I. P. (a) to (c)	I. M. (d) to (h)	B., B. & C. I. (a) to (e) & (l) & (m)	R. M. (f) to (k).	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) & (e).	B. D.	D. S.
Engineering Department.																				
1898 . . .	2,293	3,210	1,326	1,318	1,031	935	1,256	1,806	1,347	1,681	2,668	778	3,075	1,092	1,308	...	1,491	...	989	3,216
1899 . . .	2,796	5,134	1,154	1,29°	1,088	886	1,281	1,488	1,689	1,546	2,724	870	3,184	1,480	1,330	...	1,403	2,501	742	1,806
1900 . . .	3,017	4,955	1,155	1,365	1,013	1,134	1,514	1,330	1,208	1,295	1,977	849	3,365	1,733	2,252	711	1,637	...	406	2,033
1901 . . .	3,122	3,873	1,133	1,311	1,106	†	1,500	1,509	1,305	1,449	2,204	673	1,836	1,611	926	869	1,173	896	304	2,066
1902 . . .	3,30	4,190	1,365	1,104	1,048	†	1,545	2,009	1,41°	1,833	2,237	721	2,498	1,431	1,286	1,115	1,376	999	396	1,673
Locomotive Department.																				
1898 . . .	3,054	3,121	1,042	962	1,696	1,231	1,302	2,671	1,062	2,233	5,009	1,390	4,386	1,853	1,415	...	2,405	...	714	2,108
1899 . . .	3,193	3,405	1,008	1,083	1,040	1,143	1,232	2,792	1,117	2,309	5,248	1,515	4,431	2,162	1,532	543	2,808	3,213	714	1,241
1900 . . .	3,47:	3,864	1,063	1,057	1,378	1,470	1,832	2,697	1,183	2,264	5,268	1,646	4,521	2,651	1,649	756	2,682	3 231	616	1,279
1901 . . .	3,602	4,947	1,243	1,163	1,199	†	1,753	3,043	1,275	2,533	5,590	1,681	3,738	2,624	1,448	802	2,605	3,915	690	1,395
1902 . . .	3,625	5,283	1,177	1,043	1,382	†	1,761	3,023	1,307	2,526	5,941	1,870	3,998	2,328	1,892	904	2,667	2,274	555	1,597
Carriage and Wagon Department.																				
1898 . . .	946	1,244	372	394	279	245	478	592	150	472	2,476	334	1,598	487	364	...	556	...	137	349
1899 . . .	984	1,699	304	332	243	226	799	613	161	483	1,590	397	2,043	504	323	29	525	235	192	581
1900 . . .	1,012	1,733	395	205	297	250	638	548	171	441	1,192	327	1,970	763	375	51	571	207	118	621
1901 . . .	1,057	2,296	470	245	341	†	411	816	209	642	1,308	388	1,264	891	372	87	516	195	160	577
1902 . . .	827	1,395	454	345	320	†	905	1,358	355	1,065	1,450	497	1,875	893	404	96	614	302	137	594
Traffic Department.																				
1898 . . .	2,028	4,043	933	1,032	637	672	827	1,035	451	875	2,006	544	1,720	867	747	...	1,016	...	824	609
1899 . . .	2,108	4,056	940	942	631	670	886	1,059	451	883	2,063	548	1,579	876	774	297	1,012	476	852	673
1900 . . .	2,155	4,150	940	1,084	742	737	948	1,018	456	858	2,128	535	1,568	953	791	376	1,038	572	581	733
1901 . . .	2,363	4,336	960	1,011	763	†	1,040	1,124	479	938	1,998	604	1,436	1,011	761	472	982	632	412	787
1902 . . .	2,366	4,674	889	1,992	809	†	1,084	1,196	471	985	2,146	692	1,571	914	754	536	936	663	368	781
General Charges.																				
1898 . . .	1,002	1,434	462	1,062	631	582	438	466	260	416	899	520	921	720	753	...	668	...	797	945
1899 . . .	1,044	1,448	446	1,039	638	505	457	480	258	416	878	503	814	622	761	174	690	166	687	948
1900 . . .	1,049	1,450	455	1,068	668	533	472	479	279	422	942	470	747	570	728	294	724	226	406	977
1901 . . .	1,120	1,547	465	1,129	608	†	476	490	270	427	1,097	329	868	610	714	507	622	225	506	926
1902 . . .	1,125	1,026	464	1,173	654	†	513	493	284	433	1,080	347	1,000	579	643	636	668	355	731	1,022
Total Working Expenses.*																				
1898 . . .	10,242	14,087	4,215	5,253	3,800	3,719	4,566	6,725	3,316	5,795	13,626	3,847	12,239	5,000	4,813	...	6,256	...	4,176	6,476
1899 . . .	11,032	16,700	4,015	5,025	3,781	3,518	4,913	6,632	3,722	5,795	13,102	4,102	12,470	5,785	5,417	1,044	6,591	6,937	3,324	5,303
1900 . . .	11,511	17,002	4,197	5,635	4,370	4,291	5,599	6,279	3,385	5,452	12,218	4,246	12,193	6,853	6,167	2,209	6,907	4,461	2,178	5,720
1901 . . .	12,165	17,933	5,060	5,489	4,309	†	5,418	7,186	3,591	6,149	12,820	3,885	9,604	6,993	4,370	2,792	6,169	6,121	2,234	5,813
1902 . . .	11,940	18,284	4,569	5,352	4,493	†	6,079	8,346	3,898	7,046	13,591	4,360	11,313	6,400	5,281	3,373	6,565	4,727	2,359	5,681

* Includes special and miscellaneous expenditure, direct charges,
† Transferred partly
‡ Information
§ Included with the
N.B.—Excludes Cherra-Companyganj railway which

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worked of each railway (by systems).

38 and 42 of Report.)

to the code letters used to denote railway systems.

Appendix 26.
Mileage expenses.

3' 3⅜"											2' 6"					2' 0"				Gauge.
14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class : No.
			R. & K. SYSTEM.					S. M.													
A. B. (a)	D.	B. & N. W.	R. & K. (a) & (b)	P. L. (c)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g)	W. I. P. (h)	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
ENGINEERING DEPARTMENT.																					
2,079	996	888	673	...	493	471	657	763	1,054	831	1,371	414	553	267	...	917	1,509	1,158	624	897	1898
1,030	1,034	967	812	...	554	373	598	764	1,142	744	1,314	519	541	278	521	879	2,017	1,388	561	1,013	1899
1,016	867	972	707	...	406	392	560	841	1,315	837	1,264	449	602	289	543	850	1,373	978	608	2,852	1900
942	784	946	651	‡	505	441	579	919	1,475	792	1,340	438	525	302	580	753	2,087	1,080	719	412	1901
912	745	966	844	311	451	458	539	849	§	908	1,439	336	533	290	517	745	2,026	1,162	630	798	1902
LOCOMOTIVE DEPARTMENT.																					
693	1,995	655	548	...	497	431	773	988	1,624	1,580	1,797	790	1,077	382	...	663	2,671	963	441	622	1898
632	1,748	781	627	...	672	517	779	1,058	2,021	1,618	1,929	929	831	435	460	687	2,717	1,075	490	719	1899
585	2,372	794	592	...	773	734	836	1,183	1,838	1,481	2,096	1,276	556	482	494	750	2,941	1,293	405	642	1900
544	3,283	783	705	‡	681	572	695	1,123	1,939	1,719	2,287	1,057	801	443	556	753	2,853	1,593	650	1,141	1901
657	2,123	875	819	384	686	507	612	1,288	§	1,539	2,298	830	762	482	611	718	2,838	1,138	515	938	1902
CARRIAGE AND WAGON DEPARTMENT.																					
153	548	164	179	...	63	53	147	275	316	474	458	163	200	79	...	239	869	371	172	186	1898
125	1,065	182	221	...	78	169	146	309	375	444	440	182	242	116	139	381	1,001	370	144	834	1899
141	774	227	233	...	96	62	160	331	418	466	498	180	139	96	247	350	1,275	314	101	227	1900
159	212	209	277	‡	76	216	158	355	411	487	528	172	143	167	163	228	1,064	331	138	214	1901
173	211	200	264	107	118	219	105	346	§	486	515	149	157	181	140	299	861	304	121	354	1902
TRAFFIC DEPARTMENT.																					
563	1,179	553	452	...	182	207	483	534	966	743	1,032	441	1,065	566	...	760	1,003	1,287	851	712	1898
502	1,133	532	474	...	195	283	474	546	1,128	714	969	447	768	514	1,064	783	1,325	1,567	942	725	1899
533	1,164	596	477	...	214	319	494	577	1,127	707	942	501	695	514	988	800	1,353	1,642	1,013	718	1900
506	1,336	653	524	‡	184	293	413	561	1,118	684	962	405	784	518	1,025	828	1,190	1,538	1,006	559	1901
506	1,302	679	565	235	215	298	424	562	§	688	956	342	758	524	1,088	782	1,363	1,468	972	592	1902
GENERAL CHARGES.																					
781	526	455	525	...	112	207	476	570	1,784	574	733	399	1,814	405	...	638	1,463	801	549	417	1898
802	491	430	537	...	127	212	460	523	1,872	572	727	473	1,778	387	330	660	1,608	454	251	466	1899
712	491	446	529	...	127	262	447	501	1,879	601	632	346	1,714	385	346	650	1,431	419	253	416	1900
641	579	442	597	‡	134	252	447	530	1,929	612	648	361	1,772	423	331	733	1,679	533	283	423	1901
715	668	447	571	275	150	235	438	550	§	611	673	344	1,988	411	331	625	1,726	503	293	414	1902
TOTAL WORKING EXPENSES.*																					
4,305	5,323	2,878	2,790	...	1,549	1,380	2,633	3,233	5,824	4,321	5,497	2,249	4,899	1,705	...	3,279	8,109	4,580	2,649	2,867	1898
5,135	5,550	3,201	3,100	...	1,810	1,675	2,558	3,297	6,753	4,208	5,486	2,654	4,240	1,734	2,514	3,450	9,085	4,821	2,388	3,947	1899
3,060	5,746	3,234	2,900	...	1,715	1,965	2,609	3,530	6,715	4,189	5,566	2,803	3,798	1,799	2,469	3,500	8,804	4,647	2,481	3,855	1900
2,870	6,196	3,196	2,817	1,185	1,635	1,864	2,352	3,583	7,028	4,399	5,895	2,470	4,106	1,877	2,663	3,347	9,300	5,104	2,806	3,069	1901
3,102	5,050	3,410	3,148	1,346	1,710	1,787	2,172	3,684	§	4,341	6,112	2,032	4,511	1,910	2,708	3,168	9,112	4,614	2,546	3,114	1902

rent of leased lines and contribution to Provident Fund.
to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
not available.
Southern Mahratta railway.
was closed from 25th March 1900 and subsequently abandoned.

Appendix 27.
Train-mile expenses.

Working expenses per train-mile

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the key

GAUGE.	5' 6"																			
Class : No.	1	2		3	4		5	6			7 G. I. P. SYSTEM.		8 B., B. & C. I. SYSTEM.		9 N. G. S. SYSTEM.		10 MADRAS SYSTEM.		12	13
Calendar year.	E. I.	E. B. SYSTEM. 5' 6" gauge (a).	E. B. SYSTEM. Other gauges (b) to (e).	B. C.	B. N. (a) & (b).	E. C.	O. & R.	N. W. SYSTEM. Com. sec.	N. W. SYSTEM. Mily. sec.	N. W. SYSTEM. Total.	G.I.P. (a) to (c).	I. M. (d) to (h).	B., B. & C. I. (a) to (e) & (l) & (m).	R. M. (f) to (k).	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) & (e).	B. D.	D. S.
ENGINEERING DEPARTMENT.																				
1898 .	0·32	0·42	0·43	0·44	0·49	0·55	0·44	0·49	1·04	0·56	0·42	0·40	0·72	0·35	0·49	...	0·49	...	0·78	1·10
1899 .	0·37	0·68	0·37	0·44	0·54	0·47	0·41	0·42	1·32	0·53	0·43	0·42	0·73	0·43	0·49	...	0·45	0·90	0·69	0·56
1900 .	0·39	0·64	0·36	0·45	0·37	0·47	0·47	0·41	0·92	0·48	0·31	0·36	0·77	0·44	0·62	0·45	0·49	...	0·42	0·71
1901 .	0·39	0·51	0·36	0·49	0·48	†	0·42	0·38	0·85	0·45	0·35	0·29	0·52	0·42	0·33	0·45	0·34	0·36	0·26	0·72
1902 .	0·42	0·52	0·44	0·42	0·39	†	0·41	0·49	0·81	0·53	0·32	0·25	0·68	0·42	0·40	0·54	0·42	0·55	0·32	0·64
LOCOMOTIVE DEPARTMENT.																				
1898 .	0·42	0·41	0·34	0·32	0·53	0·72	0·49	0·73	0·83	0·74	0·79	0·72	1·03	0·60	0·53	...	0·80	...	0·55	0·40
1899 .	0·43	0·45	0·32	0·37	0·52	0·60	0·41	0·78	0·83	0·79	0·83	0·74	1·01	0·63	0·57	0·62	0·89	1·16	0·65	0·42
1900 .	0·45	0·51	0·33	0·35	0·50	0·61	0·57	0·84	0·90	0·85	0·84	0·72	0·95	0·68	0·49	0·48	0·82	1·42	0·60	0·45
1901 .	0·45	0·65	0·39	0·43	0·52	†	0·49	0·77	0·84	0·78	0·88	0·72	1·06	0·69	0·52	0·41	0·75	1·57	0·64	0·48
1902 .	0·46	0·67	0·38	0·39	0·52	†	0·47	0·73	0·75	0·73	0·86	0·66	1·09	0·69	0·61	0·44	0·80	1·26	0·46	0·62
CARRIAGE AND WAGON DEPARTMENT.																				
1898 .	0·13	0·17	0·10	0·13	0·13	0·14	0·18	0·16	0·12	0·16	0·39	0·17	0·38	0·16	0·13	...	0·19	...	0·11	0·20
1899 .	0·13	0·23	0·10	0·11	0·12	0·12	0·27	0·17	0·13	0·17	0·25	0·19	0·47	0·15	0·12	0·03	0·17	0·08	0·17	0·19
1900 .	0·13	0·22	0·12	0·07	0·11	0·10	0·20	0·17	0·13	0·16	0·19	0·14	0·43	0·20	0·09	0·03	0·17	0·09	0·12	0·22
1901 .	0·13	0·30	0·15	0·09	0·15	†	0·11	0·21	0·14	0·20	0·21	0·17	0·36	0·23	0·13	0·04	0·15	0·08	0·14	0·20
1902 .	0·11	0·18	0·14	0·13	0·12	†	0·24	0·33	0·21	0·31	0·21	0·17	0·51	0·26	0·10	0·04	0·19	0·17	0·11	0·23
TRAFFIC DEPARTMENT.																				
1898 .	0·28	0·53	0·30	0·34	0·30	0·39	0·29	0·28	0·35	0·29	0·32	0·28	0·49	0·28	0·28	...	0·33	...	0·64	0·22
1899 .	0·28	0·54	0·30	0·32	0·31	0·35	0·29	0·30	0·35	0·30	0·32	0·26	0·36	0·25	0·29	0·34	0·32	0·17	0·28	0·23
1900 .	0·28	0·55	0·29	0·35	0·27	0·30	0·30	0·32	0·35	0·32	0·34	0·24	0·34	0·24	0·24	0·24	0·31	0·25	0·60	0·26
1901 .	0·29	0·57	0·30	0·37	0·33	†	0·29	0·29	0·31	0·29	0·31	0·26	0·41	0·27	0·27	0·24	0·29	0·25	0·36	0·27
1902 .	0·30	0·59	0·28	0·41	0·30	†	0·29	0·29	0·27	0·29	0·31	0·24	0·43	0·27	0·21	0·26	0·28	0·33	0·30	0·30
GENERAL CHARGES.																				
1898 .	0·14	0·19	0·15	0·35	0·30	0·34	0·15	0·13	0·20	0·14	0·14	0·26	0·22	0·20	0·28	...	0·22	...	0·62	0·35
1899 .	0·14	0·19	0·14	0·35	0·31	0·26	0·15	0·13	0·20	0·14	0·14	0·24	0·19	0·18	0·28	0·20	0·22	0·06	0·63	0·33
1900 .	0·14	0·19	0·14	0·34	0·24	0·22	0·15	0·15	0·21	0·16	0·15	0·21	0·16	0·14	0·21	0·19	0·22	0·10	0·42	0·34
1901 .	0·14	0·20	0·15	0·42	0·26	†	0·13	0·12	0·18	0·13	0·17	0·14	0·25	0·16	0·25	0·26	0·18	0·09	0·44	0·32
1902 .	0·14	0·20	0·15	0·44	0·25	†	0·14	0·12	0·16	0·13	0·16	0·12	0·27	0·17	0·20	0·31	0·20	0·19	0·60	0·39
TOTAL WORKING EXPENSES.*																				
1898 .	1·42	1·84	1·38	1·74	1·80	2·17	1·65	1·83	2·57	1·91	2·20	1·97	2·88	1·61	1·90	...	2·06	...	1·88	2·28
1899 .	1·46	2·20	1·28	1·70	1·87	1·85	1·61	1·85	2·92	1·98	2·11	1·98	2·86	1·68	2·01	1·19	2·09	2·51	2·99	1·74
1900 .	1·50	2·22	1·31	1·84	1·58	1·77	1·75	1·95	2·57	2·04	1·95	1·86	2·85	1·74	1·74	1·41	2·10	1·96	2·25	1·99
1901 .	1·52	2·35	1·39	2·03	1·86	†	1·51	1·82	2·35	1·89	2·01	1·65	2·73	1·84	1·56	1·44	1·80	2·46	1·94	2·01
1902 .	1·52	2·30	1·46	2·02	1·68	†	1·61	2·01	2·25	2·05	1·97	1·53	3·09	1·89	1·86	1·64	1·98	2·61	1·94	2·19

* Includes special and miscellaneous expenditure, direct
† Transferred partly
‡ Information
§ Included with

N.B.—Excludes Cherra-Companyganj

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of each railway (by systems).

Appendix 27.
Train-mile expenses.

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to the code letters used to denote railway systems.

3′ 3⅜″											2′ 6″					2′ 0″				GAUGE.
14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	CLASS: No.
A. B.	D.	B. & N. W.	R. & K. SYSTEM. R. & K. (a) & (b).	P. L. (c).	J. B.	U. C.	B. G. J. P.	S. M. S. M. (a) to (g).	S. M. W. I. P. (h).	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
ENGINEERING DEPARTMENT.																					
1·30	0·31	0·34	0·37	...	0·47	0·62	0·50	0·44	0·98	0·27	0·43	0·23	0·09	0·11	...	0·58	0·48	0·55	0·36	0·86	1898
0·70	0·34	0·36	0·39	...	0·43	0·46	0·44	0·41	0·50	0·24	0·42	0·27	0·67	0·12	0·38	0·55	0·63	0·56	0·34	1·00	1899
0·74	0·27	0·36	0·34	...	0·31	0·40	0·37	0·39	0·80	0·28	0·40	0·19	1·06	0·12	0·37	0·52	0·37	0·37	0·35	1·81	1900
0·83	0·26	0·35	0·30	‡	0·45	0·58	0·51	0·45	0·83	0·26	0·43	0·25	0·64	0·11	0·39	0·46	0·66	0·38	0·42	0·31	1901
0·71	0·24	0·31	0·37	0·20	0·36	0·58	0·50	0·38	§	0·30	0·45	0·21	0·63	0·10	0·35	0·45	0·55	0·45	0·36	0·48	1902
LOCOMOTIVE DEPARTMENT.																					
0·44	0·62	0·26	0·30	...	0·47	0·57	0·58	0·57	1·51	0·51	0·57	0·44	0·18	0·16	...	0·42	0·86	0·45	0·25	0·57	1898
0·43	0·57	0·29	0·30	...	0·55	0·64	0·58	0·57	0·89	0·52	0·62	0·48	1·00	0·20	0·33	0·42	0·84	0·44	0·31	0·63	1899
0·43	0·74	0·29	0·29	...	0·56	0·75	0·55	0·54	1·12	0·51	0·67	0·53	1·29	0·19	0·33	0·45	0·79	0·49	0·24	0·63	1900
0·48	1·04	0·29	0·33	‡	0·61	0·96	0·61	0·55	1·09	0·57	0·74	0·60	0·98	0·16	0·38	0·46	0·83	0·57	0·37	1·19	1901
0·51	0·68	0·28	0·36	0·25	0·55	0·65	0·57	0·58	§	0·50	0·72	0·52	0·89	0·17	0·40	0·43	0·77	0·44	0·30	0·56	1902
CARRIAGE AND WAGON DEPARTMENT.																					
0·09	0·17	0·06	0·09	...	0·06	0·07	0·11	0·16	0·29	0·15	0·14	0·09	0·03	0·03	...	0·16	0·28	0·18	0·11	0·18	1898
0·08	0·35	0·07	0·11	...	0·06	0·21	0·11	0·17	0·17	0·14	0·14	0·09	0·28	0·06	0·10	0·21	0·31	0·14	0·08	0·73	1899
0·10	0·24	0·08	0·11	...	0·07	0·06	0·11	0·15	0·25	0·16	0·16	0·08	0·35	0·04	0·17	0·21	0·35	0·12	0·06	0·22	1900
0·14	0·07	0·08	0·13	‡	0·07	0·28	0·14	0·18	0·23	0·16	0·17	0·10	0·17	0·06	0·11	0·12	0·31	0·12	0·08	0·18	1901
0·13	0·07	0·06	0·12	0·07	0·10	0·28	0·10	0·15	§	0·16	0·16	0·09	0·18	0·06	0·09	0·18	0·23	0·13	0·07	0·21	1902
TRAFFIC DEPARTMENT.																					
0·35	0·36	0·22	0·25	...	0·18	0·27	0·37	0·31	0·90	0·24	0·33	0·25	0·18	0·24	...	0·48	0·37	0·61	0·50	0·68	1898
0·34	0·37	0·20	0·23	...	0·15	0·35	0·35	0·29	0·49	0·23	0·31	0·23	0·94	0·22	0·76	0·48	0·41	0·63	0·56	0·63	1899
0·39	0·36	0·22	0·23	...	0·16	0·33	0·33	0·26	0·69	0·24	0·30	0·21	1·35	0·21	0·67	0·48	0·30	0·63	0·59	0·70	1900
0·45	0·42	0·24	0·24	‡	0·16	0·39	0·36	0·28	0·63	0·23	0·31	0·23	0·96	0·19	0·70	0·50	0·35	0·55	0·58	0·46	1901
0·39	0·42	0·22	0·25	0·15	0·18	0·38	0·40	0·25	§	0·23	0·30	0·21	0·89	0·18	0·72	0·47	0·37	0·57	0·56	0·36	1902
GENERAL CHARGES.																					
0·49	0·16	0·18	0·29	...	0·10	0·28	0·36	0·33	1·66	0·18	0·23	0·22	0·31	0·18	...	0·42	0·47	0·37	0·31	0·39	1898
0·54	0·16	0·16	0·26	...	0·10	0·26	0·34	0·28	0·82	0·19	0·23	0·25	2·11	0·17	0·24	0·39	0·50	0·18	0·14	0·40	1899
0·52	0·17	0·17	0·26	...	0·09	0·27	0·30	0·23	1·14	0·20	0·20	0·15	3·18	0·15	0·23	0·39	0·31	0·16	0·15	0·41	1900
0·57	0·18	0·16	0·27	‡	0·12	0·34	0·39	0·26	1·09	0·20	0·21	0·20	2·16	0·15	0·22	0·45	0·49	0·19	0·16	0·35	1901
0·56	0·22	0·14	0·25	0·18	0·12	0·30	0·41	0·25	§	0·20	0·21	0·22	2·33	0·14	0·22	0·37	0·47	0·20	0·17	0·25	1902
TOTAL WORKING EXPENSES.*																					
2·70	1·64	1·12	1·53	...	1·27	1·82	1·99	1·86	5·41	1·38	1·74	1·25	0·83	0·72	...	2·13	2·56	2·18	1·53	2·71	1898
2·12	1·82	1·49	1·50	...	1·41	2·07	1·90	1·78	2·96	1·36	1·76	1·37	5·11	0·75	1·81	2·09	2·78	1·94	1·44	3·40	1899
2·23	1·79	1·20	1·40	...	1·29	2·01	1·73	1·61	4·08	1·43	1·77	1·17	7·41	0·72	1·67	2·12	2·38	1·77	1·44	3·78	1900
2·54	1·96	1·18	1·31	0·81	1·46	2·48	2·06	1·77	3·95	1·46	1·90	1·40	5·01	0·68	1·80	2·05	2·69	1·82	1·61	2·55	1901
2·41	1·63	1·10	1·38	0·87	1·38	2·31	2·03	1·67	§	1·42	1·89	1·27	5·29	0·68	1·79	1·90	2·51	1·80	1·47	1·87	1902

harges, rent of leased lines and contribution to Provident Fund.
the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
ot available.
e Southern Mahratta railway.
ilway which has been closed for traffic from 25th March 1900 and subsequently abandoned.

Appendix 28.
Fuel consumption.

APPENDIX 28.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class : No.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	AVERAGE DISTANCE CARRIED IN MILES.‡ Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. FOREIGN COAL. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	INDIAN COAL. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	WOOD. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	CONSUMPTION IN lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
1	E. I.	1898	Bengal and Umaria	240	...	...	...	...	379,746	4·12	2·08	...	...	...	60·92	50·03	468·52	164·67
		1899		243	...	...	...	...	412,376	4·15	2·08	...	...	...	62·37	50·82	475·67	167·43
		1900		255	...	...	...	...	461,061	4·19	2·03	...	...	...	63·80	51·61	491·00	173·42
		1901		245	...	...	...	...	474,034	4·00	1·91	...	...	...	63·05	50·47	476·61	164·71
		1902		260	...	...	...	...	481,247	4·18	1·96	...	...	...	63·92	50·76	503·10	161·42
2 (a)	E. B. S.	1898	Bengal	...	...	...	...	...	52,420	4·79	...	...	...	...	59·91	42·62	822·96	189·30
		1899		...	...	...	...	...	56,305	5·02	...	...	...	...	62·83	44·37	844·02	194·99
		1900		177	...	...	...	...	62,485	5·69	2·90	...	...	...	68·39	48·47	881·82	201·99
		1901		186	...	...	...	...	65,477	5·93	2·80	...	...	...	71·66	51·09	1008·11	226·09
		1902		167	...	...	...	...	67,891	6·10	3·48	...	...	...	69·86	49·57	889·42	209·53
3	B. C.	1898	Bengal	162	...	...	...	...	9,822	6·04	3·00	...	...	...	58·31	50·18	2079·34	265·10
		1899		162	...	...	...	...	9,264	6·24	3·25	...	...	...	50·59	45·79	1662·07	216·39
		1900		162	...	...	...	...	9,585	6·35	3·00	...	...	...	48·62	40·92	1106·46	182·55
		1901		162	...	...	...	...	8,710	6·20	3·00	...	...	...	52·05	41·75	1283·43	172·62
		1902		162	...	...	...	...	8,466	6·27	3·00	...	...	...	51·47	41·24	1,368·09	201·02
4 (a)	B. N.	1898	Bengal and Umaria	266	...	...	...	...	46,571	6·40	2·99	...	...	...	53·47	48·47	671·57	158·25
		1899		269	...	...	...	...	60,955	6·82	3·39	...	...	...	58·64	52·91	567·92	151·82
		1900		242	...	...	...	...	101,215	5·99	2·99	...	...	...	68·30	61·62	508·83	164·41
		1901		331	...	...	...	...	95,231	6·26	2·50	...	...	...	57·99	51·92	826·90	178·95
		1902		321	...	...	...	...	113,180	4·29	2·48	103	5·60	5·60	59·84	53·37	759·43	178·58
4 (b)	R. D.	1898	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		482	...	...	...	...	369	8·12	2·44	...	...	...	...	...	...	...
		1901		481	...	...	...	...	599	8·06	2·38	...	...	...	22·70	22·11	1282·31	367·28
		1902		480	...	...	...	...	554	6·41	2·37	...	...	...	23·31	22·75	1,266·15	378·98
4 (c)	P. L. L.	1898	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		603	...	...	...	...	350	7·96	2·37	...	...	...	41·56	39·06	...	...
	E. C.	1898	Bengal and Singareni	284	...	...	...	...	21,979	7·42	...	...	...	...	52·21	44·61	855·63	170·47
		1899		220	...	...	...	...	37,247	7·32	...	...	...	...	55·99	50·47	812·69	182·58
		1900		249	...	...	...	...	53,479	7·47	...	...	...	...	60·38	56·00	689·85	178·13
		1901		Transferred partly to the Bengal-Nagpur and partly to the Madras railways.														
		1902																
5 (a) & (b)	O. & R.	1898	Bengal	507	...	...	...	...	48,336	10·53	3·87	...	...	...	40·70	34·55	587·03	132·05
		1899		537	...	...	...	...	56,878	10·33	3·37	...	...	...	41·56	35·57	573·19	135·83
		1900		528	...	...	...	...	76,503	10·18	3·18	...	...	...	49·88	42·05	811·20	177·86
		1901		528	...	...	...	...	92,868	10·39	2·97	...	...	...	51·04	43·60	784·95	172·47
		1902		674	...	...	...	...	98,775	9·38	2·53	...	...	...	51·68	44·36	819·01	174·31
6(a) to(e)	N. W¶	1898	England, Bengal, Dandot, Bhaganwala and Khost	§838	...	24,385	...	17·68	139,939	§14·23 ‖11·34		171,097	5·07	...	49·20	43·55	507·51	141·59
		1899		§838	...	29,768	...	19·20	144,878	§15·63	7·56	145,008	5·27	...	50·54	44·61	553·11	147·59
		1900		§838	...	24,035	...	26·80	158,458	§17·25	7·44	123,828	5·36	...	53·25	46·59	680·47	171·20
		1901		§838	...	11,074	...	22·27	194,134	§16·81	5·38	180,521	5·21	...	51·24	44·95	520·93	149·71
		1902		§838	...	7,206	...	20·61	243,279	††	§§	122,323	...	...	52·84	46·36	593·84	160·45
6 (f) & (g)	K. K. T. & N. D. **	1898	Bengal and Dandot.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	407	...	...	97	...	...	27·25	21·71	1824·83	310·27
		1902		...	...	...	...	...	1,235	...	...	160	...	...	26·75	22·32	2072·38	318·41

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Of Bengal coal only.
‖ Excluding Bengal coal.
¶ Includes Nowshera-Durgai during the 1st-half of 1901.
** The figures against 1901 are for second-half only, those for the 1st-half are included with North-Western railway.
†† Bengal coal *vid* Kiamari Rs. 13·62 and *vid* Ghaziabad Rs. 15·44.
§§ Bengal coal from Rs. 2·37 to Rs. 3·00 and Khost and Dandot coal between Rs. 7 and Rs. 13 and Khost patent fuel at Rs. 20.

APPENDIX 28—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902—contd.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class: No.	Railway.	Calendar year.	Sources of supply. Name. †	Average distance carried in miles. ‡ Coal.	Average distance carried in miles. ‡ Wood.	Description of fuel with actual quantity consumed and cost per ton. Foreign coal. Quantity in tons.	Foreign coal. Cost per ton. Including freight.	Foreign coal. Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Indian coal. Cost per ton. Including freight.	Indian coal. Cost per ton. Excluding freight.	Wood. Quantity in tons.	Wood. Cost per ton. Including freight.	Wood. Cost per ton. Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
7 (a) to (g)	G. I. P.	1898	England, Bengal, Singareni, Umaria, Nerbuda and Warora.	350	...	1,236	...	19¦80	298,631	8·52	5·36	3,018	...	2·97	59·42	52·48	729·11	192·17
		1899		350	...	197	...	19¦50	337,716	8·31	5·48	3,511	...	2·86	64·77	56·73	792·26	206·41
		1900		371	...	...	...	...	376,245	7·86	5·24	3,883	...	3·05	68·79	59·91	819·32	209·94
		1901		318	...	...	...	...	381,380	8·57	6·18	4,349	...	2·62	66·60	57·86	764·21	198·21
		1902		294	...	303	...	12187	425,936	8·38	5·98	4,515	...	3·81	66·79	58·11	719·69	193·63
7 (h)	G. I.	1898	Bengal and Mohpani.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	962	...	...	47	...	...	29·06	...	...	...
		1901		...	...	...	...	...	886	...	...	16	...	...	32·71	33·99	...	...
		1902		...	...	...	...	...	1,400	...	...	...	...	...	35·03	35·03	...	...
8 (a) to (f)	B., B. & C. I.	1898	England, Bengal and Singareni.	168	...	8,283	17·66	...	63,128	13·52	...	1,540	5·42	...	61·93	52·52	489·95	160·07
		1899		164	...	26,212	19·68	...	53,942	15·16	...	1,885	4·05	...	56·92	48·97	492·76	148·24
		1900		164	...	16,136	22·73	...	74,587	15·84	...	2,175	3·88	...	58·85	50·17	510 34	146·31
		1901		138	...	5	27·00	...	77,916	16·13	...	2,019	3·80	...	60·26	51·16	524·84	155·57
		1902		128	...	7,477	20·00	...	65,559	15·98	...	2,063	3·27	...	58·11	48·99	543·66	154·30
8 (l) & (m)	G. D. & R.	1898	England and Bengal.	...	...	153	...	...	927	...	...	68	...	...	23·93	23·77	...	...
		1899		...	...	184	...	...	950	...	...	91	...	...	24·24	23·78	...	...
		1900		...	...	145	...	...	1,045	...	...	59	...	...	24·25	24·14	...	...
		1901		...	...	...	...	...	1,245	...	...	54	...	...	25·65	25·48	...	...
		1902		...	...	...	...	...	1,039	...	...	24	...	...	24·18	24·02	...	...
9 (a) & (b)	N. G. S.	1898	Singareni.	105	...	...	...	...	29,897	...	4·61	...	...	...	70·61	62·49	550·83	180·13
		1899		105	...	...	...	...	27,675	...	4·60	...	...	...	65·02	56·67	493·59	163·98
		1900		101	...	...	...	...	36,625	...	4·36	...	...	...	69·96	60·89	541·65	172·81
		1901		102	...	...	...	...	29,307	...	4·69	...	...	...	63·54	54·15	587·37	174·91
		1902		103	...	...	...	...	30,215	...	4·66	...	...	...	67·00	56·75	567·37	173·81
9 (c)	H. G. V.	1898	Singareni.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		493	...	...	...	...	8,969	10·77	4·50	...	...	...	44·00	40·39	1,197·34	264·49
		1901		321	...	...	...	...	13,851	7·19	4·50	...	...	...	41·05	37·73	1,189·82	231·26
		1902		341	...	...	...	...	14,442	6·98	4·86	...	...	...	40·12	36·11	1,026·21	219·62
10 (a) to (c)	M.	1898	England, Bengal and Singareni.	‡	14	25	24·59	8·14	37,092	13·06	....	85,721	5·20	4·90	61·50	52·41	918·14	210·28
		1899		‡	17	37	26·00	8·18	43,555	12·64	4·75	86,212	5·14	4·79	64·87	53·70	1,003·94	225·28
		1900		294	17	229	32·90	12·50	44,900	12·67	4·75	87,615	4·95	4·60	63·90	52·81	997·90	226·56
		1901		434	15	125	32·90	12·50	94,484	13·32	4·04	94,503	5·74	5·42	63·66	54·19	882·19	212·76
		1902		313	14	...	...	...	97,546	10·32	5·25	108,529	4·97	4·68	58·64	50·65	974·72	227·03
10 (d) & (e)	S. C. & N.	1898	England, Bengal and Singareni.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		328	...	1,004	31·12	8·18	11	17·77	4·75	157	3·94	...	94·41	91·15	...	...
		1900		328	...	1,229	38·03	12·50	8	16·79	4·75	300	3·87	...	79·14	75·52	...	...
		1901		328	...	1,510	38·03	12·50	5	18·45	4·04	385	4·00	...	88·82	85·85	1,410·33	1,302·99
		1902		241	16	1,875	31·67	27·57‖	...	...	...	3,315	4·43	4·09	72·38	66·69	1,399·75	654·46
2 (b) to (d)	E. B. S.	1898	Bengal and Assam.	...	...	...	...	...	28,078	5·75	...	...	...	...	35·85	28·64	801·85	200·00
		1899		...	...	...	...	...	31,544	5·97	...	...	...	...	35·62	29·53	899·28	203·07
		1900		287	...	...	...	...	35,904	8·20	3·59	...	...	...	38·32	30·77	783·05	215·42
		1901		303	...	...	...	...	40,271	8·71	3.69	...	...	...	39·75	32·18	920·93	229·57
		1902		291	...	...	...	...	42,838	9·82	5·14	...	...	...	42·62	34·31	898·88	235·43
2 (e)	C. B.	1898	Bengal and Assam.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		407	...	...	...	...	785	10·69	4·18	...	...	...	29·95	19·13	...	...
12	B. D.	1898	Bengal	§	...	...	...	...	927	12·95	...	...	...	...	44·01	33·96	...	...
		1899				...	...	...	1,089	10·27	...	...	...	...	61·75	47·52	...	...
		1900				...	...	...	1,388	13·11	...	...	...	...	53·65	37·01	...	...
		1901				...	...	...	2,789	15·84	...	...	...	...	49·97	41·10	...	...
		1902				...	...	...	2,496	12·33	2·75	...	...	...	40·16	33·92	...	...

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.
‖ Including sea freight from England.

P. T. O.

Appendix 28,
Fuel consumption.

APPENDIX 28—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902—contd.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class: No.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	SOURCES OF SUPPLY. Average distance carried in miles.‡ Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
13	D. S.	1898	Assam	§	...	...	...	...	3,730	8·50	...	22	2·23	...	38·30	28·00	...	...
		1899				...	...	...	4,653	8·50	...	20	2·05	...	44·20	31·36	...	...
		1900				...	...	...	4,453	8·50	...	41	2·05	...	44·19	28·34	...	...
		1901				...	...	...	4,834	8·50	...	21	2·36	...	45·54	30·08	...	...
		1902				...	...	...	4,616	8·50	8·50	26	2·08	1·28	51·64	36·75	...	...
14	A. B.	1898	Bengal and Assam.	89	...	...	...	...	8,469	7·17	...	...	...	...	40·94	33·92	733·44	173·73
		1899		80	...	...	...	...	9,994	9·53	...	...	...	...	36·63	31·18	595·14	144·14
		1900		86	...	...	...	...	9,780	9·47	...	...	...	...	36·57	31·43	636·60	163·97
		1901		106	...	...	...	...	10,781	10·22	...	1,627	1·72	...	39·09	32·95	734·11	184·88
		1902		105	...	...	...	...	13,661	9·25	...	2,715	1·57	...	43·52	37·28	1,011·99	223·73
15	D.	1898	Bengal	46	...	...	...	...	293	3·00	...	...	...	...	42·73	42·73	...	656·32
		1899		118	...	...	...	...	295	5·00	...	...	...	...	45·40	45·40	...	467·64
		1900		118	...	...	...	...	328	5·00	...	...	...	...	48·00	48·00	...	734·00
		1901		118	...	...	...	...	382	5·31	...	...	...	...	56·41	56·41	...	...
		1902		...	...	...	...	...	400	5·62	3·00	...	...	...	61·37	61·37	...	...
16 & 5 (c)	B. & N.W.	1898	Bengal	274	90	...	...	...	24,608	5·40	2·70	13,296	3·50	3·50	29·46	24·63	532·64	135·82
		1899		294	90	...	...	...	40,470	6·17	3·17	20,620	3·81	3·81	35·42	30·18	606·90	186·89
		1900		301	83	...	...	...	48,644	6·30	3·34	10,548	3·81	3·81	38·61	32·17	770·20	208·64
		1901		228	27	...	...	...	58,173	5·99	3·19	3,823	3·95	3·95	39·33	33·67	713·59	203·14
		1902		252	25	...	...	...	71,240	6·11	3·04	2,766	4·22	4·22	38·09	33·16	821·31	210·21
17 (a) &(b)	R. & K.	1898	Bengal	669	...	...	...	...	269	14·50	4·31	12,967	3·42	...	24·11	20·03	538·53	134·63
		1899		669	...	...	...	...	272	13·52	3·33	14,610	3·21	...	33·62	19·46	482·77	139·91
		1900		669	...	...	...	...	293	16·32	6·13	15,629	3·03	...	25·29	20·61	535·15	153·62
		1901		677	...	...	...	...	1,106	14·65	3·54	16,302	3·24	...	28·26	22·93	614·42	172·87
		1902		677	...	...	...	...	2,068	13·52	4·56	17,503	...	3·18	32·00	25·98	631·90	188·86
17 (c)	P. W. L.	1898	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		...	...	...	...	...	...	...	...	1,440	...	3·05	21·03	19·91	...	...
8(g) to (k)	R. M.	1898	England, Bengal and Singareni.	687	...	95	...	17·50	84,695	14·49	5·62	1,338	5·00	...	32·44	28·36	414·14	146·95
		1899		733	...	20,548	24·74	19·65	82,081	18·82	5·11	2,054	5·00	...	35·41	31·15	419·71	151·24
		1900		719	...	11,703	26·43	20·30	112,653	18·20	9·41	2,121	5·00	...	37·76	33·60	411·32	155·49
		1901		720	...	260	...	...	118,778	18·24	6·84	2,900	5·00	...	39·17	34·49	415·75	160·57
		1902		722	...	...	...	...	143,360	16·57	5·74	2,183	5·00	5·00	39·84	34·62	447·79	164·80
18	J. B.	1898	Bengal and Palana.	1,009	...	...	...	...	5,352	20·24	3·37	...	...	...	29·24	27·66	627·75	158·40
		1899		995	...	...	...	...	8,951	20·97	3·26	...	...	...	34·92	33·05	569·20	175·30
		1900		913	...	...	...	...	10,393	18·87	4·48	...	...	...	37·07	35·34	644·16	203·21
		1901		665	...	...	...	...	13,551	...	4·47	2,791	...	4·62	42·38	40·20	928·57	240·94
		1902		467	...	...	...	...	18,231	11·59	5·55	4,981	...	4·34	47·63	45·42	1,060·85	261·76
19	U. C.	1898	Bengal, Warora and Mohpani.	795	...	...	...	...	641	26·27	4·50	6	12·44	...	31·14	27·37	1,451·60	190·04
		1899		1,000	...	...	...	...	750	25·31	4·50	3	8·00	...	32·90	28·88	892·25	165·02
		1900		1,032	...	...	...	...	1,202	25·44	4·50	3	7·42	...	40·95	37·46	798·71	190·20
		1901		826	...	...	...	...	862	25·30	4·25	3	9·30	...	37·49	34·79	881·31	180·15
		1902		875	...	...	...	...	893	18·23	4·62	3	4·36	...	38·50	36·02	942·41	192·23
20	B. G. J. P.	1898	England, Bengal and Palana.	69	...	3,288	26·00	...	4,572	18·25	...	61	3·75	...	29·91	27·36	885·75	183·86
		1899		68	...	4,006	25·00	...	3,343	18·00	...	84	4·25	...	26·91	24·98	761·06	160·39
		1900		59	...	1,725	...	...	7,647	17·87	...	98	4·50	...	30·78	28·24	843·17	184·84
		1901		61	...	254	...	...	6,940	18·69	...	79	10·87	...	31·19	28·57	737·67	183·69
		1902		52	...	1,494	23·23	...	4,966	18·00	...	74	8·88	...	29·77	27·45	913·30	174·64

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.

APPENDIX 28—*concld.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton, etc.—concld.

(Referred to in paragraphs 29 and 40 of Report).

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class: No.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	SOURCES OF SUPPLY. Average distance carried in miles.‡ Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	CONSUMPTION IN lb. * Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
21	S. M.	1898	Singareni.	480	73	...	...	...	34,882	13·34	4·50	31,170	6·25	4·08	39·16	35·34	679·14	211·87
		1899		469	68	...	...	...	36,842	13·13	5·00	34,978	5·54	4·08	39·43	35·04	642·38	205·61
		1900		468	68	...	...	...	45,107	13·46	5·00	43,523	5·23	4·08	40·09	35·77	754·50	218·32
		1901		481	92	...	...	...	35,582	13·38	5·00	49,588	5·70	4·08	38·41	37·01	838·19	217·36
		1902		402	96	...	...	...	38,506	13·67	5·25	62,432	5·64	4·08	39·11	34·71	804·00	215·09
	W. I. P.	1898	England.	§	...	32	...	...	...	...	...	2,952	...	...	49·42	47·35	...	137·32
		1899				65	...	...	...	...	...	5,919	...	...	46·78	44·36	...	262·84
		1900				14	...	...	...	...	...	4,239	...	...	45·58	44·32	...	301·71
		1901				18	19·00	...	...	...	...	4,698	4·62	4·50	46·42	45·48	1,160·83	296·80
		1902				Included with the Southern Maratta railway.												
22	S. I.	1898	Bengal and Singareni.	61	...	...	...	...	41,884	12·86	...	36,431	5·79	...	36·24	36·74	1,726·71	231·79
		1899		51	...	...	...	...	49,566	12·95	...	12,402	4·75	...	35·96	31·21	1,048·01	227·22
		1900		57	...	...	...	...	51,082	13·13	...	1,858	4·54	...	35·68	32·04	1,001·16	218·69
		1901		60	...	...	...	...	55,120	13·25	...	1,343	4·50	...	34·59	31·66	823·48	201·19
		1902		63	...	...	...	...	53,273	13·11	...	10,732	5·01	...	36·44	33·19	822·47	209·97
23	B.	1898	England, Bengal and Burma.	105	...	290	43·48	...	43,803	14·04	...	26,738	3·51	...	41·53	35·04	875·03	216·83
		1899		105	...	694	...	...	46,595	15·39	...	30,105	3·64	...	45·12	37·21	929·54	233·64
		1900		128	...	...	...	...	58,020	15·62	...	44,826	3·70	...	49·80	41·12	959·88	273·70
		1901		131	...	...	...	...	70,406	14·88	...	43,301	3·53	...	54·67	44·74	1,013·12	289·08
		1902		120	...	5,062	26·75	...	66,227	12·37	...	97,748	3·95	...	56·05	53·71	1,227·87	262·63
24	M. R. W.	1898	England and Bengal.	386	...	1,268	28·31	21·00	298	25·79	17·00	...	...	...	20·67	19·80	...	...
		1899		386	...	1,224	30·50	19·00	416	27·31	17·00	20	13·45	...	20·21	19·57	...	...
		1900		386	...	1,373	27·74	20·00	1,286	28·10	19·00	37	7·49	...	26·65	25·88	...	...
		1901		386	...	2	34·80	26·80	2,125	25·67	17·00	22	13·06	...	28·69	27·99	...	...
		1902		386‖	...	...	...	...	1,622	23·74	15·74	21	7·50	7·50	24·25	23·63	...	...
25	B. L.	1898	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	677	4·19	4·19	34·26	33·74	...	...
		1902		...	...	...	...	...	...	...	...	655	5·00	...	31·90	31·14	...	...
26	B. P.	1898	Bengal.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	963	6·25	3·30	...	...	...	23·23	23·72	...	...
		1902		126	...	...	...	...	979	5·39	2·75	...	...	...	25·20	23·92	...	...
28	T. B.	1898	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1899		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	382	13·49	...	...	...	...	26·78	...	...	...
		1902		...	...	...	...	...	398	13·50	...	...	...	...	26·76	...	...	...
29	D. H.	1898	Bengal.	404	...	...	...	...	3,252	...	...	...	...	...	45·94	45·94	...	...
		1899		404	...	...	...	...	3,067	...	2·75	...	...	...	41·72	41·72	...	...
		1900		404	...	...	...	...	3,385	...	3·12	...	...	...	40·24	40·24	...	...
		1901		404	...	...	...	...	3,052	7·87	3·12	...	...	...	38·38	38·38	...	...
		1902		...	...	...	...	...	3,422	15·30	3·12	...	...	...	40·81	40·81	...	...
	TOTAL	1898		...	...	39,055	...	...	1,418,241	...	...	386,419	...	...	...	...	...	...
		1899		...	...	83,939	...	...	1,560,773	...	...	347,729	...	...	...	...	...	...
		1900		...	...	56,581	...	...	1,858,061	...	...	340,830	...	...	...	...	...	...
		1901		...	...	13,248	...	...	1,956,631	...	...	409,149	...	...	...	...	...	...
		1902		...	...	23,417	...	...	2,096,095	...	...	444,716	...	...	...	...	...	...

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.
‖ This distance is by rail; the distance by sea is 637 miles.
¶ This is the freight up to Siliguri.
N.B.—Information is not available for railways not mentioned in this statement.

Appendix 29.
Coal production.

APPENDIX 29.

Coal produced in India during the Calendar years 1885 to 1902.

(Referred to in paragraphs 29 and 40 of Report.)

YEARS.	QUANTITY PRODUCED IN EACH PROVINCE.												Quantity of Indian coal consumed by railways in India.	QUANTITY OF INDIAN COAL EXPORTED BY SEA.		QUANTITY OF FOREIGN COAL IMPORTED INTO INDIA.	
	Bengal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Baluchistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports excluding Burma.	To ports outside India including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885 .	1,123,700	119,116	43,707	7,698	...	...	...	...	...	...	...	1,294,221	486,716	Information is not available.	500	778,643	40,659
1886 .	1,186,802	117,287	70,859	13,539	..	...	...	...	...	...	...	1,388,487	470,075		199	699,482	44,652
1887 .	1,319,090	128,981	89,302	15,497	3,259	7,523	...	411	...	...	...	1,564,063	488,774		315	786,149	43,010
1888 .	1,380,594	157,768	101,528	41,580	13,382	11,249	...	2,802	...	...	...	1,708,903	551,770		15,796	785,776	20,463
1889 .	1,541,356	144,465	116,676	52,956	59,646	22,835	..	8,238	...	...	...	1,946,172	725,240		39,972	717,024	52,180
1890 .	1,626,245	137,022	145,708	77,842	125,486	49,677	...	15,541	...	...	...	2,168,521	654,829		26,336	631,725	21,857
1891 .	1,747,122	141,736	154,208	69,741	144,668	69,714	...	10,368	...	20	...	2,328,577	797,142		4,515	726,069	17,344
1892 .	1,920,050	132,005	164,050	88,623	149,601	66,352	...	43,284	...	61	3,670	2,537,696	885,492		15,725	628,374	23,123
1893 .	1,902,866	135,118	164,420	94,348	157,421	77,294	...	20,094	...	502	9,938	2,562,001	924,900		52,302	616,319	18,066
1894 .	2,035,934	140,495	169,448	132,837	240,525	66,467	...	24,753	...	1,337	12,111	2,823,907	1,062,748	143,813	154,282	675,043	57,112
1895 .	2,716,155	122,776	172,717	118,479	292,915	72,493	...	25,458	...	1,737	17,289	3,540,019	1,419,621	182,276	211,407	773,675	15,458
1896 .	3,037,920	141,185	177,259	115,386	262,681	79,017	...	26,257	...	...	22,993	3,863,698†	1,182,051	389,842	191,030	524,420	93,212
1897 .	3,142,497	131,629	185,533	124,778	365,550	92,792	...	12,043	...	...	11,472	4,066,294	1,328,120	731,742	390,979	210,257	47,016
1898 .	3,622,090	149,709	200,329	131,726	394,622	85,862	...	13,372	511	...	6,975	4,608,196	1,418,241	737,689	490,290	297,076	34,209
1899 .	4,035,265	156,576	225,623	164,569	401,216	81,835	...	15,822	4,249	..	8,405	5,093,260	1,560,771	672,311	467,306	406,451	112,064
1900 .	4,978,492	172,842	216,736	164,489	469,291	74,083	...	23,281	9,250	...	10,228	6,118,692	1,858,961	1,030,709	711,874	91,710	43,939
1901 .	5,487,585	191,516	254,100	164,362	421,218	67,730	...	24,656	12,094	...	12,466	6,635,727	1,956,631	1,157,892	845,953	112,519	79,108
1902 .	6,196,216	196,981	221,096	171,538	455,424	55,373	1,058	32,914	16,503	...	13,307	7,360,405	2,096,695	974,602	728,316	198,574	20,773

* Up to 1893 figures in this column relate to official years and exclude exports to Burma ports.
† Including 1,000 tons, produced in the United Provinces of Agra and Oudh in 1896.

APPENDIX 30.

Collieries owned and worked by Railways or the State.

(Referred to in paragraph 41 of Report.)

Particulars.	Kurhurbaree and Serampore.		Warora.		Dandot.		Khost.		Remarks.
	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	
Name of owner	East Indian Railway.		State		North Western State Railway.		North Western State Railway.		
Capital outlay . Rs.	15,00,157*	16,35,576*†	16,23,122	15,25,388	1,25,536	1,85,460	2,05,626	2,65,746	* This outlay is made up of the purchase money, Rs. 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1880. † Approximate.
Output — Large Coal Tons.	473,078	5,18,778	117,487	1,20,397	43,282	37,402	12,172	16,288	
Output — Small Coal Tons.	24,927	38,513	30,983	32,939	4,845	3,431	1,203	1,470	
Output — Slack Coal Tons.	63,165	56,498	...	...	19,604	14,552	5,096	8,184	
Output — Total Tons.	561,170	613,789	148,470	153,336	67,731	55,385	18,471	25,942	
Quantity issued . Tons.	596,265	5,76,882	148,470	153,336	67,721	55,384	18,431	25,982	
Earnings . . Rs.	11,21,359	11,99,981	6,91,280	7,00,028	5,53,604	3,62,161	2,17,503	2,77,631	
Working expenses . Rs.	11,21,359	11,99,981	4,33,127	4,38,998	4,02,662	3,64,321	1,70,691	2,58,983	
Net earnings . . Rs.	...	...	2,58,153	2,61,030	1,50,942	-2,160	46,812	18,648	
Percentage on Capital .	...	...	15·90	17·11	120·24	...	22·77	7·01	
Average No. of persons employed daily . .	7,659	8,500	1,265	1,287	1,536	1,569	458	639	
Number of tons raised per person employed .	74	72	117	119	44	36	41	41	
Number of persons killed .	3	2	1	1	...	1	16	4	
Number of persons injured	25	42	4	5	3	12	2	5	

Appendix 31.
Loads—Coaching.

Average load and weight of Coaching

N.B.—A reference to Appendix 2 will furnish the key

GAUGE.	5' 6"																	
CLASS: No.	1	2 E.B.S. system.		3	4 B. N. system.			5	6 N.-W. system.			7 G. I. P. system.		8 B., B. & C. I. system.		9 N. G. S. system.		10
Calendar year.	E. I.	5' 6" gauge.	Other gauges.	B. C.	B. N. (a)	R. D. (b)	E. C. ‡	O. & R.	Mily. Sec.	Comml. Sec.	Total. (a) to (e)	G. I. P. (a) to (c)	I. M. (d) to (g)	B., B. & C. I. (a) to (f)	R. M. (g) to (k)	N. G. S. (a) & (b)	H. G. V. (c)	M. (a) to (e)
AVERAGE NUMBER OF PASSENGERS IN A COACHING TRAIN.																		
1ST CLASS.																		
1898	1·65	1·44	1·16	0·51	0·78	...	0·71	1·52	1·08	1·99	1·89	2·23	2·73	2·34	0·84	3·09	...	2·74
1899	1·54	1·66	0·93	0·47	0·90	...	1·00	1·37	1·05	1·62	1·55	2·34	2·37	2·13	0·87	3·17	...	2·88
1900	1·44	1·50	0·94	0·45	1·07	...	1·33	1·44	1·16	1·46	1·43	2·24	1·90	1·94	0·79	2·35	1·12	2·59
1901	1·35	1·35	*0·84	0·41	0·87	0·11	...	1·20	1·07	1·39	1·35	2·08		1·95	0·85	1·16	0·68	1·90
1902	1·62	1·48	†0·85	0·48	1·09	0·12	...	1·32	0·93	1·31	1·27	2·31		1·97	1·06	2·49	1·46	2·28
2ND CLASS.																		
1898	4·78	3·59	3·40	4·45	1·84	...	1·38	5·03	3·42	7·89	7·36	9·64	9·43	14·04	3·28	13·62	...	8·12
1899	4·46	3·50	3·28	3·07	2·46	...	2·59	4·00	2·99	4·91	4·68	9·50	6·95	14·44	3·20	15·51	...	9·40
1900	4·39	3·25	3·01	2·70	2·26	...	2·98	4·45	2·55	4·15	3·96	8·01	5·16	13·14	2·73	12·01	5·86	8·85
1901	4·43	3·44	*3·01	2·07	3·09	0·19	...	4·10	2·59	4·60	4·36	8·88		12·66	3·58	6·93	4·10	6·62
1902	4·61	3·57	†2·70	2·74	2·94	0·31	...	4·64	2·78	4·48	4·22	10·77		12·07	3·34	12·80	1·14	7·60
INTERMEDIATE CLASS.																		
1898	14·49	18·58	12·42	8·95	2·37	...	0·87	12·30	5·77	12·05	11·31	8·49	...	26·74	7·10	...	...	...
1899	13·98	18·72	10·62	7·48	3·16	...	1·37	10·33	6·04	12·82	12·01	10·05	...	28·24	8·29	...	...	...
1900	14·20	17·07	11·34	8·99	3·69	...	2·08	9·99	6·06	13·99	13·05	11·92	...	27·31	8·50	...	...	...
1901	14·69	18·47	*11·87	12·10	6·40	1·73	...	10·50	5·71	15·44	14·27	14·90		27·55	9·38	...	...	0·85
1902	14·86	19·37	†11·05	12·02	5·85	1·31	...	11·94	6·14	14·08	12·91	14·60		26·53	8·58	...	...	0·98
3RD CLASS.																		
1898	202·06	148·55	166·17	149·01	132·92	...	220·61	178·31	165·96	185·88	183·07	86·44	151·20	150·12	223·98	243·54	...	220·09
1899	200·83	157·70	164·49	144·43	208·47	...	231·89	169·93	163·24	190·63	187·42	103·89	135·95	168·48	242·22	253·94	...	185·94
1900	198·35	157·07	193·04	172·49	275·02	...	247·95	155·85	159·10	190·68	186·86	112·94	122·39	187·25	243·96	228·72	208·54	210·04
1901	207·93	169·26	*170·23	210·03	232·33	101·50	...	157·05	149·07	181·04	177·19	128·55		185·58	266·02	118·12	108·55	192·94
1902	189·81	162·76	†169·77	201·52	211·45	102·01	...	142·40	128·86	170·34	164·44	113·12		184·51	239·55	214·56	195·70	211·03
TOTAL NUMBER OF PASSENGERS IN A COACHING TRAIN.																		
1898	222·99	172·17	183·17	162·98	137·91	...	223·57	197·17	175·33	207·82	203·63	106·81	163·37	193·25	235·21	260·26	...	230·95
1899	220·81	181·58	179·32	155·45	215·00	...	236·85	185·64	173·33	210·00	205·67	125·78	145·28	213·27	254·59	272·63	...	198·22
1900	218·38	178·90	206·34	184·63	282·04	...	254·35	171·74	168·87	210·29	205·31	135·11	129·44	229·65	235·99	243·09	215·52	221·49
1901	228·40	192·52	*185·95	224·61	242·69	103·53	...	172·85	158·44	202·47	197·17	154·41		227·74	279·83	126·21	113·33	202·31
1902	210·90	187·18	†184·37	216·76	221·33	103·75	...	160·30	138·71	170·21	182·84	140·89		225·08	252·53	229·85	205·30	221·89
PERCENTAGE OF FREIGHT ON CAPACITY HAULED.																		
1ST CLASS.																		
1898	7·43	6·81	6·55	2·69	4·84	...	5·23	5·15	5·29	9·76	9·22	10·02	8·60	8·64	5·09	9·37	...	17·02
1899	6·63	6·01	5·72	2·68	5·22	...	6·18	4·86	5·15	8·27	7·88	10·40	7·94	8·00	5·06	9·56	...	17·35
1900	6·73	5·67	5·25	2·44	5·30	...	6·47	4·72	5·56	7·71	7·42	10·12	6·55	7·58	4·75	7·37	3·66	16·44
1901	6·29	5·81	*5·63	2·19	5·12	3·53	...	4·54	5·91	7·33	7·17	9·97		7·88	5·17	6·48	3·44	12·07
1902	7·36	6·18	†6·16	2·99	6·69	3·04	...	4·58	5·44	7·28	7·09	11·43		8·08	6·23	7·74	3·77	18·96
2ND CLASS.																		
1898	13·63	16·90	18·97	16·10	7·38	...	6·63	14·00	14·80	28·76	27·37	17·53	21·23	16·04	17·97	32·10	...	23·49
1899	13·15	10·64	19·02	11·38	9·09	...	10·53	11·07	13·39	17·95	17·53	17·13	16·67	16·24	16·33	34·32	...	27·18
1900	14·51	10·50	17·92	9·55	7·14	...	10·08	13·72	11·61	14·72	15·31	14·49	12·30	15·10	14·31	28·43	13·02	29·35
1901	13·99	11·89	*21·41	10·17	12·03	6·50	...	13·28	13·38	17·79	17·38	16·68		14·94	19·77	28·75	16·24	24·59
1902	14·06	12·75	†19·14	10·88	12·15	8·10	...	16·51	15·07	18·42	18·10	22·82		14·34	17·67	26·61	18·27	31·65
INTERMEDIATE CLASS.																		
1898	19·38	16·49	25·38	9·67	5·10	...	6·76	15·47	14·83	26·50	25·28	19·18	28·72	39·36	31·64	...	...	...
1899	19·19	16·11	23·64	11·12	7·64	...	13·42	14·85	16·03	26·80	25·74	22·04	30·66	44·15	31·52	...	...	...
1900	21·80	14·42	23·63	11·71	10·79	...	12·32	16·84	17·88	29·65	28·59	26·03	30·51	44·47	34·16	...	...	...
1901	21·87	15·50	*28·54	12·79	17·21	...	...	20·16	16·02	31·16	29·80	27·66		43·27	47·46	...	...	5·95
1902	20·35	16·13	†29·21	14·64	15·50	...	...	21·38	16·05	28·90	27·56	21·88		41·12	39·25	...	...	11·96
3RD CLASS.																		
1898	34·65	36·12	43·98	35·18	28·23	...	39·80	39·04	31·72	39·53	38·66	33·50	36·01	39·34	51·32	33·24	...	44·85
1899	34·53	38·00	44·87	29·02	37·11	...	37·62	39·66	30·98	38·96	38·10	40·19	30·02	41·55	50·05	34·87	...	42·67
1900	36·76	36·26	51·35	37·37	45·64	...	39·28	37·57	30·69	41·11	39·88	40·41	29·84	41·25	44·70	37·14	48·90	45·27
1901	37·16	38·67	*51·37	41·35	39·52	34·89	...	36·90	31·64	38·51	37·68	42·71		41·86	50·13	35·91	43·18	44·06
1902	34·80	38·81	†57·20	42·47	34·26	47·86	...	38·39	30·59	37·00	36·34	39·23		41·67	46·64	34·40	43·93	40·63

* Excluding the Cooch Behar Railway. † Excluding Native State section of the Cooch Behar railway. ‡ Transferred partly to Bengal

DIX 31.

trains on each railway (by systems.)

to the code letters used to denote railway systems.

1	2 E. B. S. system.		3	4 B. N. System.			5	6 N. W. system.			7 G. I. P. system.		8 B. B. & C. I. system.		9 N. G. S. system.			10	GAUGE. CLASS: No.
E. I.	5' 6" gauge.	Other gauges.	B. C.	B. N. (a)	R. D. (b)	E. C. ‡	O. & R.	Mily. sec.	Comml. sec.	Total. (a) to (e)	G. I. P. (a) to (c)	I. M. (d) to (g)	B. B. & C. I. (a) to (f)	R. M. (g) to (k)	N. G. S. (a) & (b)	H.-G. V. (c)	M. (a) to (e)	Calendar year.	
AVERAGE NUMBER OF VEHICLES IN A COACHING TRAIN.																			
1st CLASS.																			
1·58	1·23	1·54	1·04	1·17	...	1·39	1·45	1·00	1·43	1·38	1·55	2·08	1·24	1·56	2·55	...	1·48	1898	
1·59	1·27	1·49	0·99	1·26	...	1·60	1·36	0·96	1·43	1·38	1·56	2·01	1·18	1·63	2·59	...	1·48	1899	
1·44	1·24	1·58	1·07	1·57	...	1·75	1·44	0·97	1·39	1·34	1·57	1·92	1·14	1·57	2·50	2·09	1·33	1900	
1·46	1·13	*1·22	1·06	1·35	0·24	...	1·29	0·90	1·38	1·32	1·60		1·07	1·57	1·57	1·06	1·27	1901	
1·55	1·14	†1·29	0·83	1·33	0·32	...	1·33	0·85	1·07	1·21	1·54		1·04	1·65	1·13	1·11	1·31	1902	
2nd CLASS.																			
1·50	1·21	1·59	1·18	1·48	...	1·40	1·38	1·02	1·42	1·37	2·03	2·11	1·98	1·46	2·49	...	1·71	1898	
1·51	1·24	1·46	1·19	1·60	...	1·62	1·36	0·96	1·43	1·37	2·04	1·98	2·03	1·53	2·65	...	1·75	1899	
1·37	1·18	1·42	1·28	1·77	...	1·81	1·17	0·93	1·37	1·32	2·05	1·96	1·98	1·46	2·48	2·03	1·57	1900	
1·43	1·12	*1·18	1·39	1·44	0·24	...	1·15	0·90	1·34	1·28	2·03		1·93	1·50	1·22	1·08	1·43	1901	
1·47	1·09	†1·21	1·20	1·36	0·32	...	1·12	0·85	1·22	1·16	1·85		1·95	1·57	1·03	1·06	1·50	1902	
INTERMEDIATE CLASS.																			
1·40	2·13	2·76	1·67	1·23	...	0·73	2·28	1·03	1·33	1·29	0·88	...	1·04	0·89	...	...	...	1898	
1·40	2·21	2·58	1·24	1·09	...	0·58	1·98	0·95	1·41	1·36	0·90	...	0·96	1·02	...	...	...	1899	
1·29	2·26	2·75	1·40	0·89	...	0·94	1·66	0·88	1·43	1·36	0·89	...	1·01	0·93	...	...	...	1900	
1·33	2·23	*2·26	1·74	1·02	...	...	1·49	0·94	1·47	1·41	0·99		1·13	0·79	...	...	0·33	1901	
1·51	2·21	†2·13	1·50	1·02	...	...	1·60	1·05	1·44	1·37	1·03		1·22	0·87	...	...	0·26	1902	
3rd CLASS.																			
10·07	6·95	12·08	7·67	9·69	...	10·07	8·45	9·63	8·84	8·93	5·16	7·70	6·69	13·71	12·16	...	9·58	1898	
10·03	7·09	11·84	7·91	11·50	...	10·93	7·91	9·75	9·13	9·20	5·13	7·85	7·12	15·00	12·10	...	8·53	1899	
9·43	7·42	12·08	8·51	12·27	...	11·50	7·59	9·82	8·82	8·94	5·54	7·27	8·04	15·14	10·50	9·22	8·93	1900	
9·52	7·53	*10·61	9·21	11·01	8·40	...	7·49	9·10	8·98	9·00	6·01		7·95	16·34	5·62	5·35	8·24	1901	
9·24	7·27	†9·52	8·55	11·48	7·08	...	6·96	8·20	8·80	8·73	5·54		7·88	15·77	5·12	5·48	9·01	1902	
TOTAL NUMBER OF VEHICLES IN A COACHING TRAIN.																			
17·92	14·27	21·05	14·73	16·32	...	17·74	16·34	15·83	16·73	16·61	12·76	15·94	14·41	21·82	22·92	...	14·13	1898	
17·80	14·50	20·49	14·53	18·24	...	19·25	15·22	15·80	17·16	17·00	12·72	15·38	14·38	23·51	21·63	...	13·26	1899	
16·78	14·99	20·76	16·31	19·56	...	19·20	14·46	15·61	16·43	16·33	13·53	14·13	15·30	23·15	19·47	16·62	13·28	1900	
16·90	14·86	*17·82	17·16	18·09	11·20	...	11·42	14·66	16·15	15·97	13·97		15·17	24·26	10·19	9·10	12·55	1901	
17·05	14·61	†16·56	15·82	18·44	10·02	...	13·66	13·72	15·58	15·31	13·48		15·35	23·97	9·31	9·39	15·44	1902	
AVERAGE WEIGHT OF FREIGHT IN TONS IN A COACHING TRAIN.																			
16·33	11·54	12·24	11·20	9·29	...	14·46	13·37	12·83	15·53	15·19	8·70	12·73	15·56	16·62	18·54	...	16·81	1898	
16·29	12·30	12·66	10·64	14·17	...	15·22	12·64	12·69	14·93	14·66	10·28	11·64	16·04	17·75	19·89	...	14·71	1899	
16·58	12·23	13·26	12·48	18·93	...	16·64	11·86	13·76	15·04	14·77	11·05	10·32	16·97	16·52	17·66	13·69	16·52	1900	
17·11	13·05	*12·35	15·09	15·98	6·61	...	11·79	12·10	14·24	13·98	11·93		16·86	19·22	8·93	7·30	14·20	1901	
15·84	12·74	†12·25	14·40	14·63	6·56	...	11·13	10·56	13·52	13·07	11·46		16·98	17·84	7·97	7·91	15·86	1902	
AVERAGE DEAD WEIGHT IN TONS IN A COACHING TRAIN.																			
236·12	209·04	132·93	196·04	245·42	...	270·90	230·97	227·74	234·49	233·69	207·03	230·53	217·62	139·96	281·48	...	188·07	1898	
236·69	212·98	131·99	200·54	263·29	...	279·97	225·63	229·43	240·40	239·11	208·46	232·81	222·86	145·81	284·41	...	180·24	1899	
226·52	219·31	148·66	212·56	246·50	...	284·60	219·33	226·54	231·73	231·10	218·90	226·53	232·05	145·30	264·43	186·00	181·42	1900	
243·16	219·36	*131·75	239·82	245·91	47·74	...	214·82	216·10	229·29	227·70	227·16		232·95	150·18	191·22	117·52	184·02	1901	
254·62	221·80	†118·73	225·45	255·71	44·74	...	217·65	206·42	224·35	220·38	226·42		237·48	159·88	127·78	102·91	224·74	1902	
TOTAL AVERAGE WEIGHT IN TONS IN A COACHING TRAIN.																			
252·45	220·58	145·17	207·24	254·72	...	285·36	244·34	240·58	250·02	248·80	215·74	243·26	233·19	156·58	300·02	...	204·89	1898	
252·98	225·28	144·05	211·18	277·47	...	295·19	238·28	242·12	255·33	253·77	218·74	244·46	238·90	163·57	301·39	...	194·95	1899	
243·10	231·55	161·92	225·05	265·43	...	301·25	231·19	239·31	246·78	245·87	229·95	236·85	249·02	161·82	282·10	199·69	197·94	1900	
260·27	232·41	*144·10	254·91	261·89	54·35	...	226·61	228·20	243·53	241·68	239·09		249·81	169·40	200·15	124·89	198·22	1901	
270·46	234·54	†130·98	239·85	270·35	51·30	...	228·78	216·98	237·87	233·45	237·88		254·46	177·22	135·75	110·82	240·59	1902	

lagpur railway and partly to the Madras railway from the 1st January 1901.

P. T. O.

Appendix 31.
Loads—Coaching.

Average load and weight of Coaching

N.B.—A reference to Appendix 2 will furnish the key

GAUGE.	3' 3⅜"									
CLASS: No.	14	16	17	18	19	20	21		22	23
Calendar year.	A. B.	B. & N. W.	R. & K. (*a*) & (*b*)	J. B.	U. C.	B. G. J. P.	S. M. (*a*) to (*g*)	W. I. P. (*h*) *	S. I.	B.
AVERAGE NUMBER OF PASSENGERS IN A COACHING TRAIN.										
1ST CLASS.										
1898	1·43	0·43	1·46	1·31	0·78	1·26	1·90	...	0·70	1·06
1899	1·27	0·44	1·48	0·93	1·05	1·13	1·73	...	0·75	1·13
1900	1·23	0·46	1·28	0·79	1·27	0·91	1·40	...	0·76	1·14
1901	0·88	0·45	1·02	0·70	0·98	1·02	1·14	0·88	0·85	1·29
1902	0·89	0·76	0·97	0·69	1·03	0·86	1·30	...	0·95	1·06
2ND CLASS.										
1898	2·39	0·72	7·14	4·58	2·31	7·32	5·08	...	2·78	4·62
1899	2·59	0·78	6·13	4·23	2·39	7·78	6·59	...	2·94	4·72
1900	2·43	0·87	6·19	4·06	2·62	6·20	4·81	...	3·19	4·99
1901	1·94	0·96	5·77	3·64	2·70	6 47	3·78	4·43	3·51	5·71
1902	1·81	0·84	6·42	3·26	2·87	6·10	4·49	...	3·57	3·88
INTERMEDIATE CLASS										
1898	...	1·49	2·51	...	3·34	...	...	...	...	5·63
1899	...	1·66	2·78	...	3·48	0·25	...	...	...	7·15
1900	0·22	2·24	2·60	...	5·18	4·83	...	...	...	3·98
1901	0·81	2·87	2·02	...	4·67	6·70	...	...	...	...
1902	0·88	2·47	2·06	...	4·95	7·55	...	...	...	...
3RD CLASS.										
1898	272·58	192·20	213·48	389·40	213·14	163·66	177·79	...	203·21	200·98
1899	280·55	177·48	233·66	410·06	284·45	186·83	171·77	...	222·91	203·55
1900	275·49	176·91	226·23	357·68	205·05	169·60	190·42	...	239·03	215·09
1901	219·78	202·02	180·92	196·96	302·96	192·23	172 63	85·74	262·93	219·49
1902	181·88	165·39	170·63	171·98	286·32	177·30	171·26	...	273·05	206·39
TOTAL NUMBER OF PASSENGERS IN A COACHING TRAIN.										
1898	276·41	194·85	224·59	395·30	219·59	172·24	184·77	...	206·69	213·82
1899	284·41	180·37	244·06	415·23	291·38	196·00	180·10	...	226·60	213·39
1900	279·59	190·49	236·30	362·54	314·15	181·55	196·63	...	242·98	221·23
1901	223·41	206·30	189·73	201·30	311·31	206·42	177·55	91·05	267·29	226·49
1902	185·46	169·05	180·08	175·93	295·18	191·81	177·05	...	277·57	211·33
PERCENTAGE OF FREIGHT ON CAPACITY HAULED.										
1ST CLASS.										
1898	6·07	2·01	5·88	10·77	7·19	5·96	15·54	...	7·27	6·69
1899	7·43	2·70	5·05	8·72	7·06	5·56	13·76	...	7·90	7·47
1900	7·92	2·98	4·98	6·43	7·15	4·76	13·72	...	8·33	7·59
1901	5·51	2·81	5·69	4·69	6·50	5·28	11·77	0·65	8·72	8·97
1902	3·34	2·40	5·64	5·31	6·73	4·43	10·09	...	9·34	9·90
2ND CLASS.										
1898	7·71	3·38	34·13	36·19	23·23	21·97	25·22	...	13·77	12·99
1899	9·02	3·87	24·82	32·94	18·57	22·88	30·04	...	16·70	12·88
1900	8·95	4·06	28·24	32·77	18·72	19·06	25·04	...	19·03	14·61
1901	7·73	4·10	41·36	20·99	17·33	18·78	23·01	3·29	20·47	21·30
1902	4·57	3·83	40·64	17·52	18·03	17·15	22·11	...	24·01	18·20
INTERMEDIATE CLASS										
1898	...	7·81	10·57	...	25·92	...	...	...	...	18·77
1899	...	8·91	11·27	...	8·11	9·33	...	...	...	23·85
1900	3·02	9·66	9·28	...	9·98	17·68	...	...	...	15·51
1901	3·33	8·36	11·98	...	10·26	30·25	...	...	...	...
1902	2·35	7·28	12·81	...	14·01	29·50	...	...	...	...
3RD CLASS.										
1898	37·96	42·73	37·97	98·92	58·55	47·88	24·92	...	47·23	49·41
1899	41·48	43·57	38·44	100·06	62·04	48·56	41·85	...	51·38	49·02
1900	43·93	42·07	69·01	91·13	52·96	48·91	44·32	...	54·93	48·88
1901	44·78	47·65	46·17	46·20	62·46	52·34	43·33	63·62	58·84	46·79
1902	39·95	44·31	43·35	40·95	65·25	47·75	43·08	...	62·09	38·92

* Included with the Southern Mahratta railway from 1902.

DIX 31—*concld.*

trains on each railway (by systems).

to the code letters used to denote railway systems.

3′3⅜″										GAUGE.
14	16	17	18	19	20	21		22	23	CLASS : No.
A. B.	B. & N. W.	R. & K. (*a*) & (*b*)	J. B.	U. C.	B. G. J. P.	S. M. (*a*) to (*g*)	W. I. P. (*h*)	S. I.	B.	Calendar year.
AVERAGE NUMBER OF VEHICLES IN A COACHING TRAIN										
1ST CLASS.										
2·03	1·81	2·07	2·13	0·88	1·97	1·51	...	1·10	1·84	1898
1·88	1·63	2·44	1·89	1·23	1·90	1·56	...	1·10	1·82	1899
1·74	1·59	2·14	2·07	1·45	1·82	1·26	...	1·06	1·86	1900
1·68	1·68	1·51	1·23	1·21	1·97	1·21	1·19	1·11	1·79	1901
1·77	1·55	1·44	1·44	1·25	1·97	1·57	...	1·10	1·60	1902
2ND CLASS.										
1·94	1·43	1·75	2·09	0·82	2·53	1·63	...	1·67	2·53	1898
1·84	1·37	2·07	2·16	1·07	2·53	1·76	...	1·45	2·67	1899
1·73	1·37	1·83	2·20	1·23	2·44	1·51	...	1·32	2·58	1900
1·61	1·54	1·35	1·37	1·29	2·76	1·32	1·01	1·36	2·35	1901
1·65	1·40	0·82	1·48	1·32	2·84	1·63	...	1·32	2·05	1902
INTERMEDIATE CLASS.										
...	0·86	1·34	...	0·89	...	...	...	...	0·54	1898
...	0·85	1·42	...	1·79	0·07	...	...	...	1·32	1899
0·43	1·04	1·31	...	2·21	1·66	...	...	...	1·12	1900
1·06	1·57	0·74	...	1·90	1·59	...	...	...	...	1901
1·42	1·51	0·74	...	1·90	1·89	...	...	...	...	1902
3RD CLASS.										
19·67	15·76	18·17	24·77	12·60	11·46	12·55	...	14·22	14·18	1898
18·99	13·82	19·67	24·80	16·01	12·68	11·87	...	13·94	14·31	1899
17·37	14·00	17·38	24·06	19·92	11·56	13·41	...	13·99	15·07	1900
13·84	14·55	11·53	12·55	16·77	11·93	12·30	7·18	14·37	15·68	1901
12·77	12·88	11·81	12·45	15·17	12·08	12·32	...	14·03	14·68	1902
TOTAL NUMBER OF VEHICLES IN A COACHING TRAIN.										
28·67	22·22	26·48	35·50	18·15	19·55	18·84	...	18·69	22·72	1898
22·40	19·90	28·86	35·44	23·77	20·63	19·53	...	19·01	22·87	1899
26·11	20·10	25·68	34·73	29·36	20·91	19·11	...	18·75	22·45	1900
22·44	21·50	17·73	19·12	21·17	21·57	17·63	9·38	19·38	22·53	1901
20·79	19·56	17·86	20·18	23·57	22·31	15·52	...	18·96	20·76	1902
AVERAGE WEIGHT OF FREIGHT IN TONS IN A COACHING TRAIN.										
18·21	12·38	15·10	27·16	14·08	11·53	12·92	...	12·95	13·64	1898
18·85	11·45	16·28	28·13	19·79	12·94	12·77	...	14·21	13·64	1899
18·36	11·42	15·75	23·72	20·36	12·11	13·41	...	15·31	16·19	1900
14·53	13·02	12·53	13·52	20·23	13·54	12·01	6·44	16·81	16·83	1901
12·28	10·72	11·89	12·24	19·68	12·72	12·24	...	17·47	13·83	1902
AVERAGE DEAD WEIGHT IN TONS IN A COACHING TRAIN.										
249·40	144·50	166·52	284·50	150·09	133·60	145·52	...	137·18	154·19	1898
239·72	137·75	183·30	287·32	187·76	139·23	149·74	...	137·43	159·19	1899
217·38	139·47	171·81	277·72	222·78	136·02	146·64	...	141·72	149·03	1900
188·70	147·31	122·95	162·45	196·67	140·56	141·42	141·21	145·77	162·78	1901
188·45	139·19	120·91	159·57	187·67	143·72	146·61	...	143·14	175·93	1902
TOTAL AVERAGE WEIGHT IN TONS IN A COACHING TRAIN.										
257·61	156·88	181·62	311·66	164·17	145·14	158·44	...	150·13	167·83	1898
258·58	149·22	199·58	315·45	207·55	152·12	162·52	...	151·64	172·83	1899
235·75	150·89	188·06	301·44	243·14	148·13	160·05	...	157·03	165·22	1900
203·23	160·33	135·48	175·97	216·90	154·10	153·43	147·65	162·58	179·61	1901
200·73	149·91	132·80	171·81	207·35	156·44	158·85	...	160·61	189·77	1902

Appendix 32.
Loads—Goods.

Average load and weight of Goods

N.B.—A reference to Appendix 2 will furnish the key to

GAUGE.	5′ 6″														
CLASS: No.	1	2		3	4			5	6			7		8	
Calendar year.	E. I.	E. B. S. SYSTEM.		B. C.	B. N. SYSTEM.		E. C.	O. & R.	N. W. SYSTEM (*a*) to (*h*)			G. I. P. SYSTEM.		B., B. & C. I. SYSTEM.	
		5′ 6″ gauge.	Other gauges.		B. N. (*a*)	R. D. (*b*)			Mily. sec.	Comml. sec.	Entire line.	G. I. P. (*a*) to (*c*)	I. M. (*d*) to (*g*).	B., B. & C. I. (*a*) to (*e*)	R. M. (*f*) to (*k*).
AVERAGE LOAD IN A LOADED GOODS VEHICLE PER MILE.															
1898	9·94	6·69	3·32	5·76	8·77	...	9·94	6·35	7·01	8·18	8·11	8·70	7·47	7·74	5·11
1899	10·38	6·59	3·37	5·84	9·11	...	10·16	6·68	6·79	7·98	7·89	8·33	7·50	7·23	4·97
1900	10·72	6·57	4·14	6·04	9·82	...	10·58	6·54	6·18	7·83	7·66	7·68	8·01	7·56	5·37
1901	10·95	6·74	3·87	5·30	6·68	4·41	*	6·65	6·94	8·91	8·75	7·66		8·24	5·66
1902	9·87	6·71	3·51	5·51	7·79	4·86	*	6·57	6·68	8·37	8·21	7·98		8·19	5·52
AVERAGE LOAD IN A GOODS VEHICLE PER MILE. (Including both loaded and empty.)															
1898	7·12	4·87	2·56	3·68	5·81	...	* 6·75	4·48	5·06	5·69	5·64	6·03	4·73	5·28	3·90
1899	7·14	4·79	2·65	3·52	5·96	...	6·63	4·70	4·90	5·73	5·65	5·93	4·67	5·33	3·81
1900	7·12	4·70	3·18	3·67	6·14	...	6·65	4·79	4·82	6·10	5·94	5·38	5·48	4·98	3·81
1901	7·45	4·79	3·09	3·24	4·67	3·08	*	4·97	4·92	6·49	6·37	5·52		6·31	4·11
1902	6·68	4·91	2·80	3·47	5·26	3·28	*	4·90	4·79	6·12	5·99	5·80		6·45	4·02
AVERAGE NUMBER OF FREIGHT VEHICLES IN A GOODS TRAIN.															
1898	27·97	29·63	27·53	15·37	21·64	...	15·76	24·38	15·23	27·73	26·35	23·46	25·69	36·68	29·08
1899	27·81	29·74	27·13	18·21	25·70	...	16·31	25·20	14·98	27·49	25·91	23·63	25·81	38·92	30·63
1900	27·51	33·40	22·81	21·24	25·48	...	18·93	23·65	14·48	24·57	23·06	24·85	27·50	40·15	32·38
1901	27·26	28·47	21·55	21·06	25·77	8·18	*	25·30	15·14	27·34	25·65	26·05		39·75	31·23
1902	29·32	29·78	27·62	19·17	24·98	9·24	*	25·26	14·59	27·11	25·20	26·45		38·12	31·49
TOTAL NUMBER OF VEHICLES IN A GOODS TRAIN, INCLUDING BRAKEVANS.															
1898	28·99	30·68	28·62	17·03	23·47	...	17·24	25·78	16·82	28·96	27·62	25·33	27·48	37·55	29·89
1899	28·72	30·75	28·21	19·85	27·60	...	17·73	26·46	16·58	28·71	27·19	25·44	27·61	39·72	31·47
1900	28·42	33·41	23·97	22·15	27·24	...	20·20	24·98	15·94	25·83	24·36	26·67	29·39	41·07	33·25
1901	28·15	29·50	22·64	21·86	27·75	9·28	*	26·53	16·46	28·47	26·81	27·96		40·60	32·11
1902	30·28	30·80	28·63	20·10	26·92	10·75	*	26·39	15·97	28·21	26·35	28·38		38·86	32·39
AVERAGE WEIGHT OF FREIGHT IN A GOODS TRAIN.															
1898	199·20	143·31	70·54	56·66	125·97	...	107·49	110·19	75·94	157·94	148·84	141·53	121·89	212·34	113·58
1899	198·67	141·52	72·02	64·16	152·99	...	108·27	119·42	72·75	157·46	146·57	140·41	120·59	207·59	110·62
1900	196·11	149·41	72·14	77·95	156·93	...	126·02	113·56	68·48	150·07	137·15	133·78	150·60	199·55	123·20
1901	203·12	136·56	66·60	68·24	120·35	25·18	*	125·62	74·44	177·54	163·29	143·72		250·75	128·42
1902	195·95	146·24	77·43	66·59	131·41	30·32	*	123·63	68·50	166·01	150·95	153·30		245·05	126·64
AVERAGE DEAD WEIGHT IN A GOODS TRAIN.															
1898	192·13	281·27	135·97	185·21	265·22	...	220·04	216·45	186·31	270·84	261·46	235·58	268·16	293·43	143·71
1899	244·29	280·78	140·81	207·52	293·73	...	212·81	224·45	186·97	272·12	261·39	240·01	273·70	310·58	150·18
1900	244·60	301·15	117·97	233·55	254·14	...	233·46	218·00	189·79	249·96	239·57	251·22	292·18	330·87	154·02
1901	252·18	275·75	128·65	230·41	261·41	41·67	*	249·21	183·92	268·66	256·94	265·22		327·45	149·55
1902	277·88	288·90	146·31	209·70	256·78	41·71	*	259·19	182·13	268·12	254·41	271·26		319·67	148·85
TOTAL AVERAGE WEIGHT OF FREIGHT AND DEAD WEIGHT, OF GOODS TRAINS.															
1898	441·34	424·59	206·51	241·87	391·19	...	327·53	326·64	262·26	428·78	410·31	377·11	390·06	505·77	257·29
1899	443·94	422·30	212·83	271·68	446·72	...	321·08	343·87	259·72	429·59	407·96	380·42	394·29	518·17	266·80
1900	440·72	450·56	190·11	311·50	411·07	...	359·49	331·56	249·27	400·04	376·72	385·01	442·78	530·42	277·28
1901	455·30	412·31	195·25	298·65	381·76	66·85	*	374·83	258·36	446·20	420·23	408·94		578·20	277·97
1902	473·83	435·14	223·74	276·29	388·19	72·03	*	382·82	259·63	434·13	405·37	424·56		565·72	275·49
PERCENTAGE OF FREIGHT UPON CAPACITY HAULED.															
1898	52·48	43·21	42·79	24·76	41·78	...	42·76	42·19	40·81	45·15	44·81	50·04	39·55	48·12	54·19
1899	51·06	41·83	41·38	23·64	43·61	...	43·32	43·24	39·37	44·90	44·40	45·76	37·31	44·09	52·70
1900	50·18	40·67	52·99	24·16	43·93	...	43·44	43·05	38·62	47·76	46·60	39·34	42·34	40·78	52·05
1901	51·69	40·92	46·61	22·17	32·12	58·72	*	44·13	39·12	50·70	49·77	40·87		50·70	48·98
1902	46·33	41·49	40·16	24·84	35·24	60·22	*	40·45	36·12	45·72	44·92	41·70		49·73	47·53

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

DIX 32.

trains on each railway (by systems).

the code letters used to denote railway systems.

3' 3½"												GAUGE.
9		10		14	16	17	18	19	20	21		22	23	CLASS: No.
N. G. S. SYSTEM.		MADRAS SYSTEM.		A. B.	B. & N. W.	R. & K. (a) &(b).	J. B.	U. C.	B. G. J. P.	S. MAHRATTA.		S. I.	B.	Calendar year.
N. G. S. (a) &(b).	H. G. V. (c).	M. (a) to (c).	S. C. & (d) & (e).							S. M. (a) to (g).	W. J. P. (h).			
AVERAGE LOAD IN A LOADED GOODS VEHICLE PER MILE.														
11·15	...	6·20	...	5·41	5·36	4·37	4·93	2·85	3·37	4·55	...	3·97	3·89	1898
11·17	...	6·15	...	3·46	5·89	5·05	5·45	3·79	3·54	4·84	...	3·92	4·03	1899
10·44	4·31	6·20	...	4·54	5·12	5·12	6·70	4·80	3·73	4·54	...	4·20	4·21	1900
10·32	3·75	7·20	9·23	5·74	5·40	4·96	5·05	4·75	3·54	4·33	5·27	4·71	4·45	1901
10·78	4·62	6·93	5·84	5·16	5·04	5·57	4·94	4·85	3·40	4·38	†	4·94	4·79	1902
AVERAGE LOAD IN A GOODS VEHICLE PER MILE. (Including both loaded and empty.)														
6·60	...	4·70	...	3·31	3·95	2·79	2·94	1·83	2·40	3·63	...	2·99	2·70	1898
6·72	...	4·59	...	2·58	4·16	3·23	3·22	2·17	2·42	3·55	...	2·90	2·84	1899
5·91	2·76	4·57	...	3·03	3·52	3·39	3·88	2·57	2·32	3·26	...	3·23	2·99	1900
6·21	2·39	5·02	7·26	3·80	3·88	3·28	3·32	2·69	2·55	3·28	4·35	3·59	3·07	1901
6·40	3·20	5·12	4·24	3·35	3·61	3·59	3·28	2·78	2·27	3·32	†	3·73	3·34	1902
AVERAGE NUMBER OF FREIGHT VEHICLES IN A GOODS TRAIN.														
24·70	...	24·21	...	23·68	23·81	21·23	20·65	23·02	24·77	21·89	...	18·78	27·45	1898
24·77	...	23·74	...	30·90	23·94	19·20	21·56	25·42	25·35	22·64	...	18·88	28·81	1899
27·19	17·29	23·24	...	25·83	24·57	17·91	18·11	26·65	25·67	22·25	...	18·97	25·07	1900
29·15	10·69	23·80	2·02	22·66	25·08	22·71	20·68	25·37	26·44	22·01	14·75	19·47	24·88	1901
19·50	10·52	22·16	5·07	20·61	24·64	23·48	21·87	24·13	27·44	21·97	†	19·70	24·33	1902
TOTAL NUMBER OF VEHICLES IN A GOODS TRAIN INCLUDING BRAKEVANS.														
26·69	...	28·26	...	25·38	25·17	22·88	20·88	23·02	25·25	22·86	...	19·41	28·95	1898
26·75	...	27·55	...	32·53	25·13	20·22	21·50	25·52	25·90	23·96	...	19·49	28·42	1899
29·16	19·00	27·09	...	27·41	25·84	19·39	18·56	26·90	26·31	23·61	...	19·52	26·35	1900
21·80	11·81	27·06	3·49	24·13	26·37	24·07	21·09	25·37	26·97	23·31	15·25	20·06	26·16	1901
20·88	11·62	23·76	6·12	21·76	25·95	24·82	22·13	24·13	27·98	23·32	†	20·34	25·44	1902
AVERAGE WEIGHT OF FREIGHT IN A GOODS TRAIN.														
162·33	...	113·94	...	77·15	94·29	59·39	60·99	42·42	59·67	78·44	...	56·24	74·34	1898
165·96	...	108·91	...	79·06	99·70	61·89	70·04	55·56	61·49	80·41	...	54·70	76·20	1899
160·92	47·34	106·33	...	77·80	86·98	60·93	69·38	68·71	59·66	72·52	...	61·33	75·01	1900
124·23	29·06	119·42	14·62	86·02	97·42	74·39	68·59	68·53	67·48	72·21	1·49	69·93	76·39	1901
124·71	33·68	113·42	21·49	69·09	89·21	84·40	71·64	67·53	62·18	73·02	†	73·46	81·31	1902
AVERAGE DEAD WEIGHT IN A GOODS TRAIN.														
258·13	...	260·31	...	145·18	124·19	127·79	114·40	121·34	122·39	118·52	...	110·74	135·46	1898
258·96	...	254·61	...	173·06	125·71	89·95	135·65	128·15	124·51	122·89	...	110·31	135·88	1899
279·15	109·87	250·82	...	139·50	129·65	93·22	101·73	131·55	123·25	122·58	...	109·59	117·84	1900
232·28	82·26	260·99	60·51	132·40	129·63	112·54	120·89	129·46	126·00	121·36	167·39	112·34	118·47	1901
207·07	69·83	235·49	81·92	120·17	129·63	117·13	119·70	124·70	129·16	124·23	†	114·11	133·90	1902
TOTAL AVERAGE WEIGHT OF FREIGHT AND DEAD WEIGHT, OF GOODS TRAINS.														
420·47	...	374·35	...	222·29	218·48	177·19	175·40	163·76	182·06	196·96	...	166·95	209·80	1898
424·92	...	363·52	...	253·02	225·42	151·85	185·69	183·72	186·00	203·30	...	165·01	212·18	1899
440·07	157·21	357·15	...	217·30	216·64	154·15	171·11	200·27	182·91	195·11	...	170·92	192·85	1900
356·51	111·32	380·41	75·13	218·42	227·05	186·93	189·48	197·99	193·48	193·57	168·88	182·27	194·86	1901
331·78	103·51	348·91	103·41	189·26	218·84	201·54	191·34	192·23	191·34	197·25	†	187·57	215·21	1902
PERCENTAGE OF FREIGHT UPON CAPACITY HAULED.														
53·76	...	39·71	...	39·97	49·17	33·85	44·09	26·62	42·69	54·29	...	50·18	44·10	1898
53·90	...	38·74	...	37·11	50·87	39·86	45·79	30·53	41·11	53·06	...	46·35	41·53	1899
46·56	28·08	38·35	...	39·50	43·38	41·13	51·84	35·58	39·38	48·42	...	50·12	43·03	1900
49·41	29·35	38·47	32·99	40·05	47·52	38·58	40·11	37·08	42·48	47·80	45·52	55·72	43·47	1901
48·18	34·90	38·79	21·70	36·06	43·85	40·14	36·04	34·32	37·78	47·86	†	56·35	45·55	1902

† Included with the Southern Mahratta railway.

Appendix 33.
Rolling-stock statistics.

Number of, outlay on, and

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key

Progressive No.		GAUGE.	5'6"						
		CLASSIFICATION NUMBER.	1	2 (a)	3	4 (a)	5 (a) & (b)	6 (a) to (e)	7 (a) to (g)
		Particulars.	E. I.	E. B. S.	B. C.	B. N.	O. & R.	N. W.	G. I. P.
		ENGINES.							
1	Passenger engines.	Number at close of 1901	133	46	*	42	42	*	170
2		Number added in 1902	7	...	*	—2	...	*	...
3		Number at close of 1902	140	46	*	40	42	*	170
4	Goods and mixed engines.	Number at close of 1901	681	72	27†	135	133	676†	582
5		Number added in 1902	33	11	...	18	6	18	25
6		Number at close of 1902	714	83	27†	153	139	694†	607
7	Number per mile of line open of all classes		0·39	0·47	0·19	0·12	0·17	0·18	0·28
8	Average mileage run by each per *annum*.	Passenger	36,101	27,085	*	36,968	29,474	*	28,931
9		Goods	22,663	21,953	*	21,391	27,006	*	19,237
10		All classes	24,866	23,783	17,034	24,620	27,555	21,192	21,372
11	Average mileage run by each.	Passenger	99	74	*	101	80	*	79
12		Goods	62	60	*	59	74	*	53
13		All classes	68	65	47	67	25	58	59
14	Average under repairs or renewals at any one time		113	15	4	28	25	*	176
15	Total value in thousands of rupees		1,48,88	*	8,64	*	50,14	2,42,47	2,52,11
16	Total value per mile of line open		6,800	*	6,912	*	4,422	6,541	9,178
		COACHING STOCK.							
17	Number at close of 1901		2,145	524	17	793	804	2,331	2,247
18	Number added in 1902		171	24	...	95	41	19	—14
19	Number at close of 1902		2,316	548	117	888	845	2,350	2,233
20	Number per mile of line open.	1st class	0·08	0·19	0·09	0·05	0·08	0·05	0·06
21		2nd class	0·06	0·13	0·07	0·03	0·06	0·02	0·08
22		Intermediate class	0·06	0·24	0·05	0·02	0·05	0·03	...
23		3rd class	0·44	0·85	0·32	0·28	0·33	0·23	0·31
24		All other classes	0·41	0·57	0·37	0·19	0·23	0·30	0·36
25		Total of all classes	1·05	1·98	0·90	0·57	0·75	0·63	0·81
26	Average mileage run by each per *annum*.	1st class	59,398	24,478	14,109	41,427	4,575	*	*
27		2nd class	75,230	32,916	27,270	50,155	3,178	*	*
28		Intermediate class	76,166	36,392	41,763	38,737	2,648	*	*
29		3rd class	61,268	34,219	41,662	69,152	17,961	*	*
30		All other classes	34,061	27,726	19,391	36,349	12,327	*	*
31		Total of all classes	52,118	31,645	28,968	43,574	40,689	42,225	43,457
32	Average mileage run by each per *diem*		143	87	79	119	111	116	119
33	Average under repairs or renewals at any one time		281	70	49	60	108	357	264
34	Total value in thousands of rupees		*	*	*	*	*	1,40,29	1,03,03
35	Total value per mile of line open		*	*	*	*	*	3,788	3,751
		GOODS STOCK.							
36	Number at close of 1901.	Covered wagons	7,813	2,018	421	3,524	3,855	7,894	6,001
37		Open ,,	2,502	241	12	1,320	...	2,913	3,845
38		Timber trucks, including bolster trucks	23	68	57	50	516	524	241
39		All other classes	78	68	4	56	45	223	227
40		Total of all classes	15,416	2,395	494	4,950	4,416	11,354	10,314
41	Number added in 1902.	Covered wagons	500	...	—1	248	228	110	318
42		Open ,,	524	—15	...	999	...	4	—10
43		Timber trucks, including bolster trucks	—23	...	...	3	94	—3	...
44		All other classes	3	...	2	1	...	12	—67
45		Total of all classes	1,004	—15	1	1,161	322	123	241
46	Number at close of 1902.	Covered wagons	8,313	2,018	420	3,772	4,083	8,004	6,319
47		Open ,,	8,026	226	12	2,229	...	2,917	3,835
48		Timber trucks, including bolster trucks	...	68	57	58	610	321	241
49		All other classes	81	68	6	57	45	235	160
50		Total of all classes	16,420	2,380	495	6,111	4,738	11,477	10,555
51	Number of all classes per mile of line open		7·35	8·59	3·56	3·95	4·18	3·10	3·84
52	Average mileage run by each per *annum*		‡17,471	13,407	5,969	13,353	17,341	16,002	16,268
53	Average mileage run by each per *diem*		48	38	16	37	48	44	45
54	Average tare in tons.	Covered wagons	6·94	7·22	7·85	7·93	8·40	7·54	7·41
55		Open ,,	6·40	6 57	7·65	7·31	...	7·02	6·54
56	Average carrying capacity in tons.	Covered wagons	14·82	11·46	12·36	14·82	11·79	14·48	13·83
57		Open ,,	14·76	14·12	17·00	15·75	...	13·44	14·21
58	Average load of a goods vehicle, loaded and empty, per mile		6·68	4·91	3·47	5·26	4·90	6·00	5·80
59	Average under repairs or renewals at any one time		561	148	188	97	138	645	619
60	Total value in thousands of rupees		*	*	19,66‖	*	‖ 1,44,10	2,94,49	2,22,62
61	Total value per mile of line open		*	*	15,728	*	12,708	7,951	8,104
62	Grand total value of rolling-stock in thousands of rupees		11,17,39	1,33,78	28,30	3,08,00	1,94,24	6,77,25	5,77,76
63	Grand total value of rolling-stock per mile of line open		51,102	48,293	22,640	19,935	17,130	18,280	21,033
		ROLLING STOCK UNDER SUPPLY.							
64	Engines		148	5	...	44	11	62	32
65	Coaching vehicles		199	33	...	23	30	...	25
66	Goods vehicles		1,009	752	...	1,258	497	2,241	839

* Information not available. † Including passenger engines. ‡ Calculated on total goods stock excluding 81 vehicles intended for railway purposes only.

DIX 33.

work done by Rolling-stock.

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to the code letters used to denote railway systems.

5' 6"			3' 3⅜"											
8 (a) to (f)	9 (a) & (b)	10 (a) to (c)	2 (b) to (e)	8 (g) to (k)	9 (c)	10 (d) & (e)	12	13	14	15	16	17 (a) and (b)	18	Progressive No.
B. B. & C. I.	N. G. S.	M.	E. B. S.	R. M.	H. G. V.	S. C. & N.	B. D.	D. S.	A. B.	D.	B. & N. W.	R. & K.	J. B.	
ENGINES.														
66	*	61	58	145	*	2	*	*	*	*	*	*	*	1
—3	*	—19	...	...	*	2	*	*	*	*	*	*	*	2
63	*	42	58	145	*	4	*	*	*	*	*	*	*	3
122	54†	171	66	283	35†	2	10†	22	53†	3†	175†	31†	40†	4
—2	4	36	—1	10	19	3	...	...	...	1	7	...	4	5
120	58†	207	65	293	54†	5	10†	22	53†	4†	182†	31†	44†	6
0·23	0·15	0·18	0·16	0·24	0·14	0·11	0·09	0·28	0·09	0·83	0·14	0·11	0·01	7
25,870	*	34,567	25,199	20,341	*	5,621	*	*	*	*	*	*	*	8
14,561	*	19,441	21,957	15,153	*	17,005	*	*	*	*	*	*	*	9
18,454	20,563	21,992	23,486	10,872	18,664	11,918	16,470	12,818	16,748	4,800	25,246	26,659	22,618	10
71	*	97	69	56	*	19	*	*	*	*	*	*	*	11
40	*	58	60	42	*	65	*	*	*	*	*	*	*	12
51	56	65	64	46	51	44	45	35	46	40	69	71	62	13
33	*	54	19	69	2	2	2	*	14	1	18	5	8	14
66·49	23·37	92·13	27,64	78,71	16,58	4,51	2,63	*	21,40	*	50,06	7,11	12,99	15
8,438	6,664	6,603	3,603	4,284	4,235	5,526	2,301	*	1,935	*	3,958	2,494	1,576	16
COACHING STOCK.														
579	182	1,459	641	1,657	128	17	71	80	182	12	795	158	145	17
39	7	22	15	19	3	30	1	...	24	...	43	3⁵	38	18
618	189	1,181	656	1,676	131	42	72	80	206	12	838	158	183	19
0·03	0·09	0·07	0·09	0·07	0·05	0·04	0·05	0·06	0·04	0·42	0·05	0·07	0·03	20
0·05	0·03	0·08	0·06	0·05	0·03	0·02	0·02	0·04	0·02	...	0·04	0·03	0·02	21
0·03	...	...	0·10	0·03	...	...	...	...	0·01	...	0·03	0·03	...	22
0·56	0·19	0·42	0·39	0·44	0·13	0·21	0·30	0·46	0·14	2·09	0·31	0·28	0·11	23
0·12	0·22	0·28	0·21	0·31	0·12	0·24	0·26	0·47	0·14	...	0·15	0·14	0·06	24
0·79	0·53	0·85	0·85	0·90	0·33	0·51	0·63	1·03	0·35	2·51	0·61	0·55	0·22	25
*	*	34,385	*	*	32,592	648	*	*	49,666	*	47,407	*	26,034	26
*	*	28,299	*	*	61,008	9,235	*	*	46,412	...	64,060	*	36,126	27
*	*	69,199	*	*	...	...	...	...	82,791	...	80,375	*	...	28
*	*	32,948	*	*	66,150	10,530	*	*	52,994	*	64,281	*	60,752	29
*	*	30,889	*	*	32,605	6,583	*	*	20,148	...	35,146	*	39,122	30
44,856	39,073	32,096	*	34,127	48,048	8,291	*	*	40,319	*	55,120	36,203	48,258	31
123	107	88	*	93	132	23	*	*	110	*	451	99	132	32
*	25	302	87	*	8	*	*	23	33	4	49	*	11	33
35,71	*	42,10	*	*	*	*	*	*	14,67	*	*	*	*	34
4,532	*	3,022	*	*	*	*	*	*	2,490	*	*	*	*	35
GOODS STOCK.														
2,463	171	2,314	2,394	4,254	300	...	233	133	624	4	5,555	689	280	36
1,738	657	1,730	367	2,677	231	16	67	714	468	4		82	295	37
90	99	185	80	79	20	...	12	50	96	...	282	76	...	38
555	11	41	210	92	7	...	4	2	78	...	32	13	...	39
4,846	938	4,276	3,057	7,102	558	16	316	899	1,246	8	5,869	860	575	40
124	—9	82	152	...	100	75	1	...	235	...		209	258	41
—68	176	53	21	—2	155	40	...	...	...	...	—47	...	...	42
...	...	...	...	...	...	8	...	...	...	...	47	...	...	43
3	3	14	—20	...	3	...	...	...	—1	...	—1	2	...	44
59	70	146	153	—2	258	123	1	...	234	...	—1	211	258	45
2,587	162	2,396	2,546	4,254	400	75	234	133	859	4	5,508	898	538	46
1,670	733	1,789	388	2,675	386	56	67	714	468	4		82	295	47
90	99	185	86	79	20	8	12	50	76	...	329	76	...	48
558	14	52	190	92	10	...	4	2	77	...	31	15	...	49
4,905	1,008	4,422	3,210	7,100	816	139	317	899	1,480	8	5,868	1,071	833	50
6·25	2·84	3·17	4 18	3·77	2·08	1·70	2·78	11·60	2·51	1·67	4·30	3·75	1·01	51
9,196	17,791	13,004	*	17,702	10,516	1,946	*	*	5,715	*	9,288	9,180	11,255	52
25	49	36	*	48	29	6	*	*	16	*	25	25	31	53
*	7·19	7·23	3·97	5·90	4·36	8·10	*	*	4·30	3·09	3·64	4·90	3·85	54
*	6·76	6·42	2·80	4·15	4·01	7·96	*	*	3·24	3·00		2·70	4·73	55
*	11·86	13·08	6·58	9·38	10·00	19·75	*	*	9·71	5·00	8·69	9·84	9·24	56
*	14·87	12·85	6·16	12·15	10·04	19·97	*	*	6·34	5·00		6·00	12·77	57
*	6·40	5·12	2·80	4·02	3·20	4·24	*	*	3·35	*	3·61	3·59	3·28	58
*	49	552	155	157	16	*	*	34	125	2	134	*	19	59
1,03,93	29,08‖	1,20,48	71,28‖	1,48,24‖	19,91‖	10,84‖	9,10‖	*	22,05	*	1,24,20‖	26,05‖	21,28‖	60
13,189	8,292	8,036	9,290	8,009	5,087	13,274	7,972	*	3,573	*	9,821	9,436	2,643	61
2,06,13	52,45	§ 2,54,77	98,92	2,26,95	36,49	15,35	§ 11,73	19,19	47,12	3,01	1,74,26	33,16	34,77	62
26,159	14,956	18,261	12,893	12,353	9,322	18,800	10,273	24,757	7,998	80,266	13,779	11,630	4,219	63
ROLLING-STOCK UNDER SUPPLY.														
46	...	12	15	...	...	...	...	...	24	...	43	10	4	64
229	...	31	64	66	...	4	...	...	62	...	104	15	22	65
196	...	464	537	1,107	...	...	...	...	436	...	200	91	100	66

§ Including outlay on rolling-stock on lines under construction.

‖ Including value of coaching stock.

P. T. O.
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Appendix 33.
Rolling-stock statistics.

Number of, outlay on, and

(Referred to in paragraph

N. B.—A reference to Appendix 2 will furnish the key

Progressive No.	GAUGE.	3′ 3⅜″					2′ 6″		
	CLASSIFICATION NUMBER.	19	20	21	22	23	4 (*b*)	6 (*g*)	9 (*l*) & (*m*)
	Particulars.	U. C.	B. G. J. P.	S. M.	S. L.	B.	R. D.	N. D.	G. D. & R.
	ENGINES.								
1	Passenger engines. Number at close of 1901	*	*	26	69	28	*	*	*
2	Passenger engines. Number added in 1902	...	*	4	...	...	*	*	*
3	Passenger engines. Number at close of 1902	1	*	30	69	28	*	*	*
4	Goods and mixed engines. Number at close of 1901	2	†37	193	139	178	4†	10†	11†
5	Goods and mixed engines. Number added in 1902	...	...	8	6	3	...	1	...
6	Goods and mixed engines. Number at close of 1902	2	†37	201	145	161	4†	11†	11†
7	Number per mile of line open of all classes	0·04	0·08	0·14	0·17	0·17	0·07	0·24	0·09
8	Average mileage run by each per *annum*. Passenger	*	*	22,738	25,421	23,048	*	*	*
9	Average mileage run by each per *annum*. Goods	*	*	16,969	14,692	21,870	*	*	*
10	Average mileage run by each per *annum*. All classes	18,533	24,309	17,718	18,151	22,028	13,639	11,849	8,882
11	Average mileage run by each per *diem*. Passenger	*	*	62	70	63	*	*	*
12	Average mileage run by each per *diem*. Goods	*	*	46	40	60	*	*	*
13	Average mileage run by each per *diem*. All classes	51	39	49	50	60	37	33	24
14	Average under repairs or renewals at any one time	1	*	39	49	29	*	*	*
15	Total value in thousands of rupees	93	7,56	49,17	46,99	56,63	*	3,50	1,44
16	Total value per mile of line open	1,384	1,661	2,987	3,729	4,492	*	8,701	1,242
	COACHING STOCK.								
17	Number at close of 1901	26	263	1,006	983	837	22	21	54
18	Number added in 1902	...	1	47	7	23	...	...	...
19	Number at close of 1902	26	264	1,053	990	860	22	21	54
20	Number per mile of line open. 1st class	0·03	0·08	0·06	0·06	0·07	0·02	0·07	0·07
21	Number per mile of line open. 2nd class	0·03	0·04	0·05	0·06	0·06	0·02	...	...
22	Number per mile of line open. Intermediate class	0·03	0·02	...	..	...	...	...	...
23	Number per mile of line open. 3rd class	0·22	0·31	0·33	0·51	0·37	0·29	0·25	0·28
24	Number per mile of line open. All other classes	0·06	0·13	0·20	0·17	0·18	0·06	0·20	0·12
25	Number per mile of line open. Total of all classes	0·37	0·58	0·64	0·80	0·68	0·39	0·52	0·47
26	Average mileage run by each per *annum*. 1st class	14,614	16,426	23,647	30,208	27,272	8,662	*	*
27	Average mileage run by each per *annum*. 2nd class	15,619	43,643	34,157	31,393	38,977	8,664	...	...
28	Average mileage run by each per *annum*. Intermediate class	27,392	55,158	...	...	...	...	...	...
29	Average mileage run by each per *annum*. 3rd class	29,305	24,852	32,916	41,553	34,614	11,776	*	*
30	Average mileage run by each per *annum*. All other classes	28,426	19,609	21,302	26,812	32,076	27,137	*	*
31	Average mileage run by each per *annum*. Total of all classes	26,292	25,084	28,205	36,710	33,573	14,136	*	*
32	Average mileage run by each per *diem*	72	69	77	101	92	39	*	*
33	Average under repairs or renewals at any one time	1	13	53	68	122	*	1	*
34	Total value in thousands of rupees	1,19	8,90	*	36,91	45,87	*	44	1,29
35	Total value per mile of line open	1,734	1,954	*	2,987	3,639	*	1,085	1,107
	GOODS STOCK.								
36	Number at close of 1901. Covered wagons	25	298	3,179	1,921	2,375	20	51	38
37	Number at close of 1901. Open „	10	662	1,136	1,322	884	55	33	179
38	Number at close of 1901. Timber trucks including bolster trucks	...	22	188	51	307	...	6	2
39	Number at close of 1901. All other classes	...	23	211	6	243	...	2	2
40	Number at close of 1901. Total of all classes	35	1,005	4,714	3,300	3,809	75	92	221
41	Number added in 1902. Covered wagons	...	...	98	23	411	...	23	...
42	Number added in 1902. Open „	...	...	—6	....	22	...	—1	—6
43	Number added in 1902. Timber trucks including bolster trucks	...	...	49	...	43	...	1	...
44	Number added in 1902. All other classes	...	...	6	...	16	...	...	...
45	Number added in 1902. Total of all classes	...	...	147	23	492	...	23	—6
46	Number at close of 1902. Covered wagons	25	298	3,277	1,944	2,786	20	74	38
47	Number at close of 1902. Open „	10	662	1,130	1,322	906	55	32	173
48	Number at close of 1902. Timber trucks including bolster trucks	...	22	237	51	350	...	7	2
49	Number at close of 1902. All other classes	...	23	217	6	259	...	2	2
50	Number at close of 1902. Total of all classes	35	1,005	4,861	3,323	4,301	75	115	215
51	Number of all classes per mile of line open	0·50	2·21	2·95	2·69	3·41	1·33	2·86	1·84
52	Average mileage run by each per *annum*	5,627	5,357	9,843	9,989	10,510	3,231	*	*
53	Average mileage run by each per *diem*	16	15	27	27	29	9	*	*
54	Average tare in tons, Covered wagons	4·02	3·72	3·81	4·17	4·81	3·10	4·49	*
55	Average tare in tons, Open „	3·22	3·11	3·25	3·52	3·76	3·50	3·20	*
56	Average carrying capacity in tons Covered wagons	7·40	5·68	7·50	7·03	9·20	5·00	8·64	*
57	Average carrying capacity in tons Open „	6·29	6·12	6·90	6·77	8·74	8·11	7·98	*
58	Average load of a goods vehicle, loaded and empty, per mile	2·78	2·27	3·32	3·73	3·34	3·28	1·27	*
59	Average under repairs or renewals at any one time	*	15	157	276	332	*	3	*
60	Total value in thousands of rupees	58	11,98	98,86‡	47,84	77,12	*	2,76	1,45
61	Total value per mile of line open	845	2,631	6,005	3,871	6,118	*	6,849	1,249
62	Grand total value of rolling-stock in thousands of rupees	2,72	28,44	1,48,03	1,30,84	1,79,62	3,25	6,70	4,18
63	Grand total value of rolling-stock per mile of line open	3,963	6,246	8,992	10,587	14,249	57,78	16,635	3,598
	ROLLING-STOCK UNDER SUPPLY.								
64	Engines	...	...	7	4	27	...	2	...
65	Coaching vehicles	...	...	...	115	89	...	8	...
66	Goods vehicles	...	...	...	327	200	...	10	...

* Information not available. † Including passenger engines. ‡ Including value of coaching stock.

DIX 33—*concld.*

work done by Rolling-stock.

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to the code letters used to denote railway systems.

2′ 6″						2′ 0″						Progressive No.
1 (*c*)	24	25	26	27	28	6 (*h*)	7 (*h*)	29	30	31	32	
F. W. L.	M. R. W.	B. L.	B. P.	R K. L.	T. B.	D. L.	G. L.	D. H.	H. A.	H. S.	J.	
ENGINES.												
•	5	•	•	•	•	...	•	•	•	...	•	1
•	... 5	•	•	•	•	...	•	•	•	...	•	2
•		•	•	•	•	...	•	•	•	...	•	3
4†	3	4†	4†	2†	3†	7	8†	14†	5†	4†	7†	4
1 5†	... 3	... 4†	... 4†	... 2†	... 3†	... 7	3 11†	... 14†	2 7†	... 4†	... 7†	5 6
0·13	0·08	0·19	0·12	0·10	0·15	0·12	0·09	0·27	0·24	0·20	0·23	7
•	22,975	•	•	•	•	•	•	•	•	•	•	8
•	13,341	•	•	•	•	•	•	•	•	•	•	9
12,958	19,325	18,846	22,912	15,290	•	•	8,139	13,416	10,534	8,578	•	10
•	63	•	•	•	•	•	•	•	•	•	•	11
•	37	•	•	•	•	•	•	•	•	•	•	12
35	53	44	63	42	•	•	22	36	29	23	•	13
•	2	1	1	•	1	•	2	1	•	•	•	14
•	1,29	•	68	•	60	•	1,45	2,44	1,65	65	•	15
•	1,366	•	2,198	•	2,988	•	1,152	4,768	5,764	3,280	•	16
COACHING STOCK.												
18	54	7	25	14	12	...	25	76	56	19	10	17
... 18	... 54	... 7	... 25	... 14	1 13	...	16 41	12 88	... 56	... 19	... 10	18 19
0·05	0·07	...	0·08	...	0·20	...	0·06	0·42	...	...	0·07	20
0·05	0·06	...	0·01	...	...	...	...	0·56	...	...	...	21
...	...	...	0·09	...	...	...	...	...	...	...	...	22
0·33	0·35	0·09	0·52	0·44	0·30	...	0·14	0·68	1·39	0·66	0·27	23
0·03	0·09	0·23	0·10	0·25	0·15	...	0·12	0·06	0·56	0·30	...	24
0·46	0·57	0·32	0·80	0·69	0·65	...	0·32	1·73	1·95	0·96	0·34	25
•	•	•	•	...	•	...	•	2,262	...	...	•	26
•	•	•	•	...	...	...	...	1,707	...	...	...	27
...	...	...	•	...	...	...	...	...	...	...	...	28
•	•	•	•	•	•	...	•	1,390	•	•	•	29
•	•	•	•	•	•	...	•	16,213	•	•	•	30
•	•	•	•	•	•	...	•	1,552	•	•	•	31
•	•	•	•	•	•	...	•	5	•	•	•	32
•	6	4	•	•	•	...	•	•	•	•	•	33
•	1,25	•	67	•	•	...	1,01	•	•	•	•	34
•	1,330	•	2,132	•	•	...	823	•	•	•	•	35
GOODS STOCK.												
58	20	7	20	4	30	...	30	37	14	4	41	36
...	96	15	15	...	18	...	53	152	9	4	25	37
...	...	39	...	...	2	...	...	17	...	...	...	38
12	1	1	...	4	...	326	100	6	...	...	9	39
70	117	62	35	8	50	326	183	212	23	8	75	40
...	—13	...	...	...	...	...	...	...	...	...	...	41
...	...	...	...	...	...	...	...	...	...	...	...	42
2	...	...	...	...	...	...	...	...	...	...	...	43
—2	...	...	...	...	...	...	...	...	10	...	...	44
...	—13	...	...	...	...	...	...	...	10	...	...	45
58	20	7	20	4	30	...	30	37	14	4	41	46
... 2	83	15 39	15	...	18 2	...	53	152 17	9	4	25	47 48
10	1	1	...	4	...	326	100	6	10	...	9	49
70	104	62	35	8	50	326	183	212	33	8	75	50
1·80	1·12	2·87	1·12	0·40	2·50	0·53	1·45	4·16	1·15	0·41	2·50	51
•	•	•	•	•	•	•	•	•	•	•	•	52
•	•	•	•	•	•	•	•	•	•	•	•	53
3·13	3·25	5·90	2·75	2·75	•	...	•	•	2·75	2·75	•	54
•	3·80	•	2·25	...	•	...	•	•	•	2·50	•	55
4·76	4·50	14·10	5·00	5·00	•	...	•	•	0·37	5·00	•	56
...	5·70	•	5·00	...	•	...	•	•	0·37	5·00	•	57
•	•	13·78	•	•	•	•	•	•	•	•	•	58
•	8·00	•	•	•	•	•	•	•	•	•	•	59
•	1,53	•	53	•	‡1,01	•	98	3,16‡	2,96‡	1,00‡	•	60
•	1,626	•	1,701	•	5,032	•	778	6,203	10,323	5,065	•	61
1,41‖	4,07	4,15	1,88	1,45	1,61	§	3,47	3,62	4,62	1,65	1,89	62
3,567	4,322	19,230*	6,036	7,155	8,020	§	2,753	10,991	16,087	8,345	6,286	63
ROLLING-STOCK UNDER SUPPLY.												
...	...	4	3	...	...	...	...	2	...	...	...	64
...	...	7	...	...	...	...	...	3	...	...	...	65
...	...	51	...	...	...	...	...	...	...	...	...	66

§ Included with the North Western railway.

‖ Including outlay on rolling-stock on lines under construction.

Appendix 33-A.
Rolling-stock and work done.

Statement showing Rolling-stock on some of the railways

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to the

GAUGE.	5′ 6″											
CLASSIFICATION No.	1				2				4			
Particulars.	EAST INDIAN.				EASTERN BENGAL STATE (*a*).				BENGAL-NAGPUR (*a*).			
	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase
LOCOMOTIVES.												
Number of Locomotives on the 31st December . . . . No.	814	854	40	4·91	118	129	11	9·32	177	193	16	9·04
Capital expenditure on Locomotives up to the 31st December . . . in thousands of Rs.	*10,63,09	*11,17,39	54,30	5·11	*1,24,54	*1,33,78	9,24	7·42	78,00	*3,08,00	‡44,45	‡16·87
Total engine miles run . . . . Miles.	21,038	21,235	197	0·94	2,870	3,068	198	6·90	4,108	4,752	644	15·68
Engine mileage run per engine . . . . . ,,	25,845	24,366	—979	—3·79	24,326	23,783	—543	—2·23	23,213	24,620	1,407	6·06
Gross ton-miles hauled, . in millions of tons ,,	6,446	6,679	233	3·61	649	726	77	11·87	© 1,192	1,420	228	19·14
Ton-mileage hauled per engine . . . . in thousands of tons,,	7,920	7,821	—99	—1·25	5,498	5,626	128	2·33	6,735	7,358	623	9·25
Length of system on the 31st December . . . . . ,,	2,101·27	2,186·58	85·31	4·06	268·04	277·02	8·98	3·35	1,552·98	1,546·00	—6·98	—0·45
Number of passengers carried in thousands . . No.	23,875	23,256	—619	—2·59	7,905	8,225	320	4·05	6,021	6,383	362	6·01
Tonnage of goods carried . in thousands of tons.	§10,418	§10,484	66	0·63	§1,616	§1,800	184	11·36	§ 2,185	§ 2,870	685	31·35
COACHING VEHICLES.												
Number of vehicles on the 31st December . . . . . No.	2,145	2,316	171	7·96	524	548	24	4·58	793	888	95	11·98
Capital expenditure on vehicles up to the 31st December . . . . in thousands of Rs.	*10,63,09	*11,17,39	54,30	5·11	*1,24,54	*1,33,78	9,24	7·42	†1,85,55	*3,08,00	‡44,45	‡16·87
Total vehicle mileage run . . . Miles.	116,448	120,705	4,257	3·66	17,228	17,341	113	0·66	32,369	38,594	6,225	19·23
Vehicle mileage run per vehicle . . . . . ,,	54,288	52,118	—2,170	—4·00	32,878	31,645	—1,233	—3·75	40,818	43,574	2,756	6 75
Coaching freight ton mileage . . . . . in thousands of tons ,,	107,060	102,226	—4,834	—4·52	14,162	14,064	—98	—0·69	28,293	27,936	—357	—1·26
Freight ton-mileage per vehicle . . . . . ,,	49	44	—5	—10·20	27	26	—1	—3·70	35	31	—4	—11·43
Length of system on the 31st December . . . . . ,,	2,101·27	2,186·58	85·31	4·06	268·04	277·02	8·98	3·35	1,552·98	1,546·00	—6·98	—0·45
Number of passengers carried . . . . in thousands No.	23,875	23,256	—619	—2·59	7,905	8,225	320	4·05	6,021	6,383	362	6·01
GOODS VEHICLES.												
Number of vehicles on the 31st December . . . . . No.	15,416	‖16,339	923	5·99	2,395	2,380	—15	—0·63	4,950	6,111	1,161	23·45
Capital expenditure on vehicles up to the 31st December . . . . . in thousands of Rs.	*10,63,09	*11,17,39	54,30	5·11	*1,24,54	*1,33,78	9,24	7·42	†1,85,55	*3,08,00	‡44,45	‡16·87
Total vehicle mileage run . . . Miles.	259,325	285,867	26,542	10·24	27,271	31,908	4,637	17·00	69,721	81,601	11,880	17·04
Vehicle mileage run per vehicle . . . . . ,,	16,822	17,471	649	3·86	11,387	13,407	2,020	17·74	14,085	13,353	—732	—5·20
Goods freight ton-mileage in millions of tons ,,	2,149	2,040	—109	—5·07	131	157	26	19·85	229	306	77	33·63
Freight ton-mileage per vehicle . . . . in thousands of tons ,,	139	125	—14	—10·07	55	66	11	20·00	46	50	4	8·70
Length of system on the 31st December . . . . . ,,	2,101·27	2,186·58	85·31	4·06	268·04	277·02	8·98	3·35	1,552·98	1,546·00	—6·98	—0·45
Number of tons carried in thousands of tons ,,	§ 10,418	§ 10,484	66	0·63	§1,616	§1,800	184	11·39	§ 2,185	§ 2,870	685	31·35

* The expenditure on locomotives and coaching and goods vehicles has not been kept separate in the accounts.

† The expenditure on coaching and goods vehicles has not been kept separate in the accounts.

‡ Increase and percentage of increase have been

§ The quantity of goods carried over the several railways is given to show the volume of traffic dealt with by each. In the case of many railways, a large are not credited. The extent to which this was the case may be judged from Appendix

‖ Excluding 81 vehicles intended for railway purposes only.

¶ Including 2′ 6″ gauge lines, as the figures cannot be separated.

DIX 33-A.

Appendix 33-A.
Rolling-stock and work done.

in 1901 and 1902, and the work done by it.

50 of Report).
code letters used to denote railway systems.

5′ 6″											
5				6				7			
OUDH AND ROHILKHAND.				NORTH WESTERN (*a*) TO (*e*).				GREAT INDIAN PENINSULA SYSTEM (*a*) TO (*g*).			
1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.
LOCOMOTIVES.											
175	181	6	3'43	676	694	18	2'66	752	777	25	3'32
47,58	50,14	2,56	5'38	2,33,14	2,42,47	9,33	4'00	*5,66,00	2,52,11	‡11,76	‡2'08
4,771	4,987	216	4'53	13,736	14,707	971	7'07	14,831	16,499	1,668	11'25
27,265	27,555	290	1'06	20,320	21,192	872	4'29	19,722	21,372	1,650	8'37
1,206	1,284	78	6'47	4,134	4,250	116	2'81	4,329	4,952	623	14'39
6,892	7,094	202	2'93	6,115	6,124	9	0'15	5,758	6,373	615	10'68
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
8,764	8,332	—432	—4'93	¶20,293	¶20,822	529	2'61	22,534	20,771	—1,763	—7'82
§1,899	§2,302	403	21'22	¶§5,603	¶§5,934	331	5'91	§4,510	§4,611	101	2'24
COACHING VEHICLES.											
804	845	41	5'10	2,831	2,350	19	0'82	2,247	2,233	—14	—0'62
†1,28,76	†1,44,10	15,34	11'91	†4,24,55	2,40,99	‡10,23	‡2'41	*5,66,00	2,03,03	‡11,76	‡2'08
32,432	34,382	1,950	6'01	82,629	99,228	16,599	20'09	76,413	97,040	20,627	26'99
49,338	49,689	351	0'87	35,448	42,225	6,777	19'12	34,007	43,457	9,450	27'79
25,579	25,654	75	0'29	72,762	76,748	3,986	5'48	65,934	70,127	4,193	6'36
32	30	—2	—6'25	31	33	2	6'45	29	31	2	6'90
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
8,764	8,332	—432	—4'93	¶20,293	¶20,822	529	2'61	22,534	20,771	—1,763	—7'82
GOODS VEHICLES.											
4,416	4,738	322	7'29	11,354	11,477	123	1'08	10,242	10,555	313	3'06
† 1,28,76	†1,44,10	15,34	11'91	†4,24,55	2,94,49	‡10,23	‡2'41	*5,66,00	2,22,62	‡11,76	‡2'08
73,448	82,162	8,714	11'86	191,207	183,654	—7,553	—3'95	177,742	171,706	—6,036	—3'40
16,632	17,341	709	4'26	16,960	16,002	—958	—5'65	17,354	16,268	—1,086	—6'26
239	244	5	2'09	1,117	1,072	—45	—4'03	1,057	1,262	205	19'39
54	52	—2	—3'70	99	93	—6	—6'06	103	120	17	16'50
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
§1,899	§2,302	403	21'22	¶§5,603	¶§5,934	331	5'91	§4,510	§4,611	101	2'24

It has not, therefore, been possible to show it separately.
It has not, therefore, been possible to show it separately.
calculated on the total value of rolling-stock.
part of the traffic was carried in foreign railway wagons. In the case of some, the home vehicles carried traffic on foreign lines with the quantity of which they
No. 21. The vehicle mileage figures, however, represent all the work done by each railway's own vehicles.

P. T. O.

Appendix 33-A.
Rolling-stock and work done.

APPEN

Statement showing Rolling-stock on some of the railways

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to the

GAUGE.		5′ 6″											
CLASSIFICATION No.		8				9				10			
Particulars.		B. B. & C. I. (*a*) to (*f*).				N. G. S. (*a*) & (*b*).				M. (*a*) to (*e*).			
		1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.
LOCOMOTIVES.													
Number of Locomotives on the 31st December	No.	188	183	—5	—2·66	54	58	4	7·41	232	249	17	7·33
Capital expenditure on Locomotives up to the 31st December	in thousands of Rs.	***2,21,24**	***2,25,11**	‡3,87	‡1·75	*47,82	*23,37	‡4,63	‡9·68	82,20	92,13	9,93	12·08
Total Engine miles run	in thousands of miles	3,447	3,377	—70	—2·03	1,163	1,193	30	2·58	5,472	5,476	4	0·07
Engine mileage run per engine	„	18,338	18,454	116	0·63	21,551	20,563	—988	—4·58	23,590	21,992	—1,598	—6·77
Gross ton-miles hauled	in millions of tons	1,134	1,072	—62	—5·47	372	389	17	4·57	¶1,394	1,391	—3	—0·22
Ton-mileage hauled per engine	in thousands of tons	6,031	5,858	—173	—2·87	6,904	6,714	—190	—2·75	6,008	5,585	—423	—7 04
Length of system on the 31st December	„	‖683·12	‖643·67	—39·45	—5·77	350·71	350·71	...	...	1,377·30	1,394·86	17·56	1·28
Number of passengers carried	in thousands No.	‖17,623	‖18,435	812	4·61	1,409	1,750	341	24·20	12,277	13,005	728	5·93
Tonnage of goods carried	in thousands of tons.	§1,901	§1,857	—44	—2·32	§920	§935	15	1·63	§2,412	§2,319	—93	—3·86
COACHING VEHICLES.													
Number of vehicles on the 31st December	No.	579	618	39	6·73	182	189	7	3·85	1,159	1,181	22	1·90
Capital expenditure on vehicles up to the 31st December	in thousands of Rs.	***2,21,24**	***2,25,11**	‡3,87	‡1·75	*47,82	†29,08	‡4,63	‡9·68	†1,56,67	42,16	‡5,97	‡3·81
Total vehicle-mileage run	in thousands of miles.	28,064	28,549	485	1·73	7,332	7,385	53	0·72	32,753	37,905	5,152	15·73
Vehicle-mileage run per vehicle	„	48,470	46,196	—2,274	—4·69	40,284	39,073	—1,211	—3·01	28,260	32,096	3,836	13·57
Coaching freight ton-mileage	in thousands of tons	28,675	29,336	691	2·50	4,754	5,010	256	5·39	30,091	32,427	2,426	8·08
Freight ton-mileage per vehicle	in thousands of tons	49	47	—2	—4·08	26	27	1	3·85	25	27	2	8·00
Length of system on the 31st December	„	‖683·12	‖643·67	‡ —39·45	—5·77	350·71	350·71	...	...	1,377·30	1,394·86	17·56	1·28
Number of passengers carried	in thousands No.	‖17,623	‖18,435	812	4·61	1,409	1,750	341	24·20	12,277	13,005	728	5·93
GOODS VEHICLES.													
Number of vehicles on the 31st December	No.	4,846	4,905	59	1·22	938	1,008	70	7·46	4,276	4,422	146	3·41
Capital expenditure on vehicles up to the 31st December	in thousands of Rs.	***2,21,24**	***2,25,11**	‡3,87	‡1·75	*47,82	†29,08	‡4,63	‡9·68	†1,56,67	1,20,48	‡9,97	‡3·81
Total vehicle-mileage run	in thousands of miles.	51,602	44,280	—7,322	—14·19	20,099	17,685	—2,414	—12·01	47,164	57,504	10,340	21·92
Vehicle-mileage run per vehicle	„	10,648	9,028	—1,620	—15·21	20,148	17,791	—2,357	—11·70	11,030	13,004	1,974	17·90
Goods freight ton-mileage	in millions of tons	307	275	—32	—10·42	107	114	7	6·54	306	291	—15	—4·90
Freight ton-mileage per vehicle	in thousands of tons	64	56	—8	—12·50	114	113	—1	—0·88	72	66	—6	—8·33
Length of system on the 31st December	„	‖683·12	‖643·67	—39·45	—5·77	350·71	350·71	...	...	1,377·03	1,394·86	17·56	1·28
Number of tons carried	in thousands of tons.	§1,901	§ 1,857	—44	—2·32	§ 920	§935	15	1·63	§2,412	§2,319	—93	—3·86

* The expenditure on locomotives and coaching and goods vehicles has not been
† The expenditure on coaching and goods vehicles has not been kept separately
‡ Increase and percentage of increase have been
§ The quantity of goods carried over the several railways is given to show the volume of traffic dealt with by each. In the case of many railways they are not credited. The extent to which this was the case may be judged from Appendix No. 21.
‖ Excluding the Godhra-Rutlam-Nagda railway.
¶ Including the Godhra-Rutlam-Nagda railway.

DIX 33-A—*concluded.*

Appendix 33-A.
Rolling-stock and work done.

in 1901 and 1902, and the work done by it.

go of Report.)
code letters used to denote railway systems.

3′ 3¾″.

2				8				16				17			
EASTERN BENGAL STATE. (*b*) to (*d*).				RAJPUTANA-MALWA. (*g*) to (*k*).				BENGAL AND NORTH-WESTERN.				ROHILKUND AND KUMAON. (*a*) and (*b*).			
1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase	1901.	1902.	Increase.	Percentage of increase.
LOCOMOTIVES.															
121	120	*—1*	*0·83*	428	438	10	2·34	175	182	7	4·00	31	31	...	...
*92,35	25,93	‡4,69	‡5·08	77,60	78,71	1,11	1·44	41,15	50,06	8,91	21·65	6,73	7,11	38	5·65
2,802	2,797	*—5*	*—0·18*	7,815	7,390	*—425*	*—5·44*	3,981	4,595	6,14	15·42	745	782	37	4·97
23,163	23,307	144	0·62	18,260	16,872	*—1,388*	*—7·60*	22,749	25,246	2,497	10·98	24,037	26,059	2,022	8·41
392	408	16	4·08	1,676	1,553	*—123*	*—7·34*	658	771	113	17·18	98	108	10	10·20
3,247	3,396	149	4·59	3,917	3,545	*—372*	*—9·50*	3,761	4,236	475	12·63	3,188	3,470	282	8·85
698·91	733·67	34·76	4·98	¶1,948·94	¶2,022·78	73·84	3·79	1,280·19	1,282·73	2·54	0·20	285·09	285·09	...	...
5,252	5,576	324	6·17	¶12,873	¶12,091	*—782*	*—6·08*	9,684	10,126	442	4·56	1,539	1,592	53	3·44
§883	§971	88	9·97	§¶2,392	§¶2,230	*—162*	*—6·77*	§1,345	§1,460	115	8·55	§372	§432	60	16·13
COACHING VEHICLES															
625	640	15	2·40	1,657	1,676	19	1·15	795	838	43	5·41	158	158	...	...
*92,35	†71,11	‡4,69	‡5·08	†1,40,88	†1,48,24	7,36	5·22	†1,20,61	†1,24,20	3·59	2·98	‡19,80	†26,05	6,25	31·52
19,297	18,850	*—447*	*—2·32*	56,268	57,197	9,29	1·65	35,078	46,190	11,116	31·69	5,352	5,720	368	6·88
30,075	29,453	*—1,422*	*—4·61*	33,958	30,513	*—3,445*	*—10·14*	44,118	55,120	11,002	24·94	33,873	36,203	2,330	6·88
12,106	12,706	600	4·96	41,359	39,757	*—1,602*	*—3·87*	22,358	25,192	2,834	12·67	3,487	3,519	32	0·94
19	20	1	5·26	25	24	*—1*	*—4·00*	28	30	2	7·14	22	22	...	...
698·91	733·67	34·76	4·98	¶1,948·94	¶2,022·78	73·84	3·79	1,280·19	1,282,73	2·54	0·20	285·09	285·09	...	...
5,252	5,576	324	6·17	¶12,873	¶12,091	*—782*	*—6·08*	9,684	10,126	442	4·56	1,539	1,592	53	3·44
GOODS VEHICLES.															
2,990	3,145	155	5·18	7,102	7,100	*—2*	*—0·03*	5,869	5,868	*—1*	*—0·02*	860	1,071	211	24·54
*92,35	†71,11	‡4,69	‡5·08	†1,40,88	†1,48,24	7,36	5·22	†1,20,61	†1,24,20	3,59	2·98	†19,80	†26,05	6,25	31·52
27,301	32,289	4,988	18·27	146,773	125,682	*—21,091*	*—14·37*	49,254	54,504	5,250	10·66	9,112	9,831	719	7·89
9,131	10,267	1,136	12·44	20,666	14,362	*—6,304*	*—30·50*	8,392	9,288	896	10·68	10,595	9,180	*—1,415*	*—13·36*
85	94	9	10·59	605	532	*—74*	*—12·12*	165	172	7	4·24	24	29	5	20·83
28	30	2	7·14	85	76	*—9*	*—10·59*	28	29	1	3·57	28	27	*—1*	*—3·57*
698·91	733·67	34·76	4·98	¶1,948·94	¶2,022·78	73·84	3·79	1,280·19	1,282·73	2·54	0·20	285·09	285·09	...	...
§883	§971	88	9·97	§¶2,392	§¶2,230	*—162*	*—6·77*	§1,345	§1,460	115	8·55	§372	§432	60	16·13

kept sparate in the accounts. It has not, therefore, been possible to show it separately.
in the accounts. It has not, therefore, been possible to show it separately,
calculated on the total value of rolling-stock.
a large part of the traffic was carried in foreign railway wagons. In the case of some, the home vehicles carried traffic on foreign lines with the quantity of which
The vehicle mileage figures, however, represent all the work done by each railway's own vehicles.
** Including outlay on machinery.

Appendix 34.
Rolling-stock.

Rolling-stock under different heads on each

(Referred to in paragraph 50

N. B.—A reference to Appendix 2 will furnish the key to the

Items.	GAUGE.	5′ 6″											3′ 3½″						
	CLASS No.	1	2 (a)	3	4 (a)	5 (a) & (b)	6 (a) to (e)	7 (a) to (e)	7 (d) to (g)	8 (a) to (f)	9 (a) & (b)	10 (a) to (c)	2 (b) to (d)	8 (g) to (k)	9 (c)	10 (d) & (e)	12 (a) & (b)	13	14
	Particulars.	E. I.	E. B.	B.C.	B. N.	O. & R.	N. W	G. I. P.	I. M.	B. B. &C.I.	N. G. S.	M.	E. B. S.	R. M.	H. G. V.	N. & S.C	B. D.	D.S.	A. B.
	Engines.																		
1	Passenger engines	140	46	(d)	40	42	...	160	10	63	(d)	42	...	145	(d)	4	(d)	(d)	(d)
2	Goods and mixed engines	714	83	27	153	139	...	450	157	120	58	207	...	293	54	5	10	22	53
3	TOTAL ENGINES	854	129	27	193	181	(b)694	610	167	(c)183	58	249	110	438	54	9	10	22	53
	Coaching vehicles.																		
4	Saloons, Royal and State	4	1	...	...	...	11	...	...	...	14	2	2	5	...	...	...	...	2
5	Saloons, ordinary	2	13	4	1	...	...	...	...	13	2	...	17	1	...	...	2	...	...
6	Reserved carriages	39	2	...	11	16	63	...	5	8	5	...	...	...	7	...	...	...	...
7	Inspection carriages	...	...	1	4	...	...	...	1	...	...	3	...	11	...	...	1	...	8
8	Family carriages	...	...	...	...	2	...	...	8	...	...	...	...	...	...	...	...	...	...
9	First class carriages { 4-wheeled	97	11	4	26	40	96	71	22	4	10	52	14	108	7	...	3	...	4
	{ Bogie	2	...	...	...	...	...	2	...	1	...	2	2	...	...	2	...	...	...
10	Composite, first and second class. { 4-wheeled	64	42	8	49	56	91	60	34	17	12	65	56	46	8	...	7	8	4
	{ Bogie	11	7	...	...	10	24	12	...	21	...	...	2	13	2	2	...	...	11
11	Composite, first second and third class, { 4-wheeled	...	...	...	5	4	...	...	2	...	...	...	...	...	...	...	...	...	...
	{ Bogie	...	...	...	...	...	10	10	5	...	...	8	...	...	...	2	...	...	8
12	Other composite carriages	10	14	...	...	...	10	...	...	1	...	...	...	3	...	...	...	...	...
13	Second class . { Bogie	...	...	...	...	...	...	...	...	6	...	...	2	...	...	...	...	...	...
	{ Ordinary	87	12	4	28	33	98	135	22	33	10	79	10	91	6	...	2	...	...
14	Second class with postal accommodation	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	...	...
15	Intermediate class . { 4-wheeled.	93	24	4	26	39	120	...	...	13	...	4	44	49	...	...	...	...	...
	{ Ambulance	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	58
	{ Bogie	...	...	...	...	...	...	...	...	9	...	...	2	...	...	...	...	...	...
16	Composite, intermediate, and third class	62	33	6	15	31	81	...	...	...	...	...	40	25	...	...	1	...	(e)36
17	Intermediate and postal carriages	...	4	2	3	...	18	...	...	5	...	...	3	8	...	...	2	...	...
18	Intermediate third and postal carriages	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...
19	Lower class	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Third class carriages { 4-wheeled	122	163	34	296	72	81	458	192	173	64	506	237	559	45	...	34	35	...
	without brakes. { Bogie	57	11	...	50	...	...	29	...	66	...	9	8	157	3	16	...	...	...
	{ Ambulance	92	...	...	23	...	198	23	...	15	...	51	...	5	...	...	...	...	...
21	Third class and postal vans	51	3	...	14	31	39	...	17	8	5	12	8	24	3	...	...	...	12
22	Third class carriages { 4-wheeled and Bogie.	48	...	12	59	76	378	110	27	30	...	8	7	113	...	...	...	...	22
	with brakes. { Ambulance	...	...	...	...	187	197	...	22	...	...	...	...	...	...	...	...	...	...
23	Brakevans	687	73	19	207	259	452	537	73	252	49	258	80	307	40	14	15	20	12
24	Brakevans with third class	...	13	...	19	...	101	...	21	...	...	...	...	...	...	...	...	...	...
25	Brakevans fitted with postal compartment	...	...	...	...	...	12	...	13	...	...	...	...	...	...	...	...	6	...
26	Postal vans	22	3	...	...	...	10	7	...	...	...	9	3	...	...	...	...	...	...
27	Composite, postal and other carriages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Prison vans	...	...	...	...	...	...	6	2	...	...	...	1	5	...	...	...	...	...
29	Carriage trucks	39	6	...	4	...	42	50	5	4	2	27	5	38	...	3	...	...	...
30	Horse boxes	75	17	1	16	41	142	93	15	18	10	56	10	82	10	3	...	3	13
31	Luggage vans	41	23	4	34	43	61	90	25	26	6	30	14	24	...	...	...	4	12
32	Produce Vendors' vans	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Milk vans	...	15	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Fish vans	...	20	8	...	...	...	...	...	...	...	...	22	...	...	...	...	2	3
35	Store, ice and stationery vans	1	...	...	...	2	16	...	...	...	...	...	...	...	...	...	...	...	...
36	Miscellaneous	10	4	8	...	3	1	...	...	...	...	...	12	2	...	...	2	2	1
37	TOTAL COACHING VEHICLES	2,316	548	117	888	845	2,350	1,724	509	618	189	1,181	607	1,626	131	42	72	80	206
	Goods vehicles.																		
38	Covered goods wagons, bogies { Ordinary	...	256	...	...	...	...	...	...	...	...	...	...	471	...	75	...	...	...
	{ Military	...	...	...	...	...	412	...	...	...	...	...	...	...	...	...	...	...	...
39	Covered goods wagons, 4-wheeled. { Ordinary	3,305	685	420	2,455	2,190	2,305	4,439	1,880	1,404	46	293	1,174	3,418	300	...	234	133	849
	{ Military	4,941	1,077	...	1,278	1,893	5,227	...	...	(g)1,183	116	2,021	1,261	365	100	...	...	...	...
40	High-sided wagons, bogie	...	...	12	...	...	...	50	...	...	10	...	...	...	2	43	...	...	...
41	High-sided wagons, 4-wheeled	...	22	...	...	...	933	2,798	591	1,003	504	1,196	...	134	300	...	...	644	125
42	Medium-sided wagons, bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	Medium-sided wagons, 4-wheeled	...	...	...	870	...	...	...	...	410	290	...	...	150	84	6	...	...	...
44	Low-sided wagons, Bogie. { Ordinary	...	...	...	...	...	102	...	...	102	...	80	54	227	...	...	...	...	...
	{ Military	...	...	...	...	...	140	...	...	70	...	...	...	951	...	7	...	...	...
45	Low-sided wagons, 4-wheeled. { Ordinary	4,371	...	42	190	188	543	280	25	85	...	150	237	23	...	...	67	70	300
	{ Military	2,502	167	8	153	328	1,199	...	...	...	...	230	101	1,192	...	...	...	...	...
46	Coal or coke wagons	861	...	...	890	94	...	...	...	...	...	130	...	...	...	...	...	...	...
47	Cattle wagons	7	5	...	...	...	24	...	...	...	...	42	...	...	...	...	1	...	7
48	Accident vans	25	10	2	8	...	...	27	10	...	...	15	7	45	2	...	...	...	3
49	Platform wagons	41	...	...	89	...	...	...	...	...	...	3	3	...	...	...	...	...	43
50	Powder vans	31	1	2	6	8	47	18	4	...	...	9	2	35	...	...	...	1	3
51	Timber trucks	...	22	7	36	...	49	191	...	90	28	185	84	79	20	8	12	50	60
52	Bolster trucks . { Double	...	...	...	...	...	271	...	...	...	...	...	...	...	...	...	...	...	...
	{ Single	...	58	...	17	...	...	...	50	...	...	...	(i)25	...	...	...	...	...	16
53	Ballast wagons	248	37	...	76	...	...	...	91	480	...	...	...	...	...	...	...	...	50
54	Travelling oil tanks	29	21	...	16	...	41	23	...	15	...	31	...	12	...	...	...	...	...
55	Travelling water tanks	...	3	...	...	8	42	...	11	21	3	4	2	...	...	...	...	...	...
56	Travelling gas holder	3	3	...	8	5	15	8	3	8	2	6	2	...	1	...	...	...	4
57	Travelling cranes	29	5	2	11	17	51	47	9	4	2	15	14	29	2	...	3	1	13
58	Miscellaneous	27	8	...	8	7	16	...	...	30	7	12	6	1	5	...	...	...	7
59	TOTAL GOODS VEHICLES	16,420	2,380	495	6,111	4,738	11,477	7,881	2,674	4,995	1,008	4,422	2,949	7,100	816	139	317	899	1,480
	LOWER CLASS CARRIAGES FITTED WITH RETIRING																		
	Intermediate class	(a) 83	14	4	35	19	(h)120	...	...	12	...	...	26	79	...	...	(l)3	...	...
	Third class	(a&(b) 94	15	5	40	56	180	113	35	18	...	62	29	109	...	...	...	...	16
	TOTAL	177	29	9	75	75	300	113	35	30	...	62	55	188	...	...	3	...	16

(a) Nine bogie composites intermediate and third taken as 9 each.
(b) Includes 2 composites, Intermediate and third.
(c) Excludes 3 Passenger and 4 Goods engines condemned during the year.
(d) Included with goods engines as no distinction is made in the line returns between Passenger and Goods and mixed engines.
(e) Intermediate and brakevans.

DIX 34.

railway at close of the Calendar year 1902.

of Report.)

code letters used to denote railway systems.

	3′ 3⅜″								2′ 6″											2′ 0″						
15	16	17 (a) & (b)	18	19	20	21	22	23	2 (b)	2(e)	4(b)	6 (g)	8 (l) & (m)	17 (c)	24	25	26	27	28	6 (h)	7 (h)	29	30	31	32	Items.
D.	B. & N. W.	R. & K.	J. S.	U. C.	B.G. J.P.	S.M.	S. I.	B.	E.B.S.	C.B.	R. D.	N.D	G. D. & R.	P. W. L.	M. R. W.	B. L.	B. P.	R. K. L.	T.B.	D. L.	G. L.	D. H.	H. A.	H. S.	J.	
4	(d) 182	(d) 31	(d) 44	1 2	(d) 37	30 201	69 145	28 181	... ...	... ...	(d) 4	(d) 11	(d) 11	(d) 5	5 3	... (d)4	(d) 4	(d) 2	(d) 3	... ...	(d) 11	... ...	(d) 7	(d) 4	... ...	1 2
4	182	31	44	3	37	231	214	209	10	3	4	11	11	5	8	4	4	2	3	7	11	14	7	4	2	3
...	3	...	3	...	8	8	1	1	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...	...	...	4
...	13	...	...	...	2	...	3	17	1	1	...	...	...	...	3	1	...	...	...	...	2	2	...	...	...	5
...	4	4	...	...	7	11	...	27	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	6
...	...	2	5	...	...	...	12	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	7
...	3	...	3	1	5	...	3	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	8
...	9	6	4	...	9	44	19	27	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	9
...	26	3	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	10
...	28	8	20	3	1	54	38	38	...	...	2	...	...	3	...	...	2	...	...	...	...	3	...	...	...	11
...	6	...	...	...	3	12	...	11	4	2	...	...	...	...	4	...	...	...	...	...	2	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	12
...	...	...	...	2	2	8	9	5	5	2	...	...	...	...	...	...	...	2	4	...	...	28	4	2	...	
...	...	...	...	...	3	...	...	...	...	...	...	...	6	...	4	...	...	...	...	...	...	6	...	...	2	13
...	33	6	6	1	10	43	44	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	
...	24	3	...	2	8	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	46	10	...	...	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	3	2	...	...	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
10	...	...	...	...	...	...	...	...	...	...	...	...	32	...	...	2	...	...	6	...	...	34	...	...	8	19
...	215	49	66	11	127	198	511	262	...	...	14	4	...	10	15	...	16	9	...	...	13	...	40	13	...	20
...	6	10	17	...	12	53	...	65	11	6	...	6	...	...	13	...	...	...	...	...	...	...	...	...	...	
...	203	...	...	...	...	1	15	59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
...	16	2	8	1	4	37	14	16	1	...	...	...	...	...	2	...	...	...	...	...	5	...	...	...	...	22
...	...	15	3	3	...	256	78	45	...	...	3	...	...	4	...	...	4	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	7	1	...	23
2	167	6	30	3	41	45	52	132	7	...	3	5	11	...	7	...	...	3	...	...	...	...	2	1	...	24
...	...	...	...	...	...	180	28	23	2	2	...	...	...	...	...	...	...	...	...	3	4	...	...	...	...	25
...	...	21	...	...	...	...	6	...	...	...	...	3	...	...	...	...	...	...	...	...	...	3	...	...	...	26
...	...	...	...	...	...	...	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	28
...	...	...	...	...	...	6	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
...	5	...	...	...	6	14	5	1	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	30
...	30	5	12	1	5	47	30	36	...	...	...	...	2	...	2	...	...	...	...	...	1	...	...	...	...	31
...	1	6	...	...	1	22	81	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
...	...	2	4	...	...	12	5	15	1	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	36
12	838	158	183	26	264	1,053	990	860	33	16	22	21	54	18	54	7	25	14	13	...	41	88	56	19	10	37
...	200	109	6	25	...	85	20	525	55	56	...	49	...	1	10	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4	4,786	787	496	...	153	2,941	1,613	1,801	...	...	20	25	38	57	10	7	20	4	30	...	30	37	114	4	42	39
...	...	...	...	...	145	193	267	335	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	37	...	16	...	...	...	13	...	...	4	...	...	...	...	...	2	...	...	...	...	22
...	...	...	...	...	...	170	813	60	...	...	...	19	83	...	31	5	...	...	12	...	41	156	4	4	...	40
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	41
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42
...	...	...	...	...	...	140	...	310	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43
...	28	...	150	10	20	...	20	95	18	...	25	...	90	...	48	...	...	...	...	...	...	...	10	...	...	44
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4	494	82	145	...	566	525	...	...	...	9	30	...	...	2	...	39	15	4	6	...	16	7	5	...	3	45
...	...	...	...	...	...	28	...	286	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	350	...	...	...	...	...	...	...	...	...	...	...	...	...	(j)326	...	...	...	...	...	46
...	...	...	35	...	6	28	6	151	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	47
...	...	6	...	...	...	13	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48
...	2	...	...	...	...	45	4	...	3	...	...	7	...	...	...	...	...	...	2	...	...	...	...	...	...	49
...	1	2	1	...	2	13	7	12	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	50
...	329	76	...	...	22	127	51	43	2	...	...	...	2	2	...	...	...	...	...	...	...	4	...	...	(i)4	51
...	...	...	...	...	...	...	...	157	(g) 110	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	52
...	...	...	...	...	...	65	...	150	...	...	...	...	...	...	...	...	...	...	...	...	100	...	...	...	...	53
...	...	...	...	...	74	...	461	103	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	54
...	...	...	...	...	2	8	17	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55
...	...	...	...	...	1	7	23	13	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	56
...	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57
...	19	8	...	...	2	21	6	27	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	
...	9	1	...	...	12	20	15	128	...	...	...	...	2	8	...	...	...	...	...	...	...	6	...	...	5	58
8	5,868	1,071	833	35	1,005	4,861	3,323	4,301	196	65	75	115	215	70	104	62	35	8	50	326	183	212	33	8	75	59
ACCOMMODATION FOR FEMALES.																										
...	...	10	...	2	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	2	14	15	14	62	44	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	12	14	17	24	62	44	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

(*f*) Includes 150 salt wagons.
(*g*) These are wooden trucks for carrying stone.
(*h*) Includes 13 bogie and 41 composites intermediate and third class.
(*i*) Rail trucks.
(*j*) Trucks for carrying coal.
(*k*) Excluding 4 engines on 3′ 3⅜″ gauge.
(*l*) These are intermediate and third class composites.

Appendix 35.
Automatic brakes.

APPENDIX 35.

Rolling-stock fitted with automatic brakes at close of 1902.

(Referred to in paragraph 51 of Report).

Class: No.		Gauge.	Railway.	Locomotives.			Coaching vehicles.				Goods vehicles, excluding cranes.			
Main.	Sub.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	...	5′ 6″	East Indian	332	522	38·88	1,428	94	794	65·72	15	108	16,268	0·75
2	(*a*)		Eastern Bengal	94	35	72·87	401	46	101	81·57	25	15	2,335	1·68
3	...		Bengal Central	5	22	18·52	...	1	116	0·85	...	...	493	...
4	(*a*)		Bengal-Nagpur	81	112	41·97	557	51	280	68·47	2	10	6,988	0·20
5	(*a*) & (*b*)		Oudh and Rohilkhand	74	107	40·88	595	52	198	70·41	25	10	4,686	0·74
6	(*a*) to (*e*)		North Western	548	146	84·44	1,773	103	474	79·83	453	102	10,871	4·86
7	(*a*) to (*c*)		Great Indian Peninsula	279	331	45·74	1,254	...	470	72·74	...	93	7,741	1·19
7	(*d*) to (*g*)		Indian Midland	104	63	62·28	160	50	299	41·26	...	25	2,640	0·94
8	(*a*) to (*f*)		Bombay, Baroda and Central India	129	54	70·49	491	11	116	81·23	1	58	4,842	1·20
9	(*a*) & (*b*)		Nizam's Guaranteed State	...	58	...	53	6	130	31·22	...	...	1,006	...
10	(*a*) to (*c*)		Madras	116	133	46·59	645	42	494	58·17	105	8	4,294	2·56
2	(*b*) to (*d*)	3′ 3½″	Eastern Bengal*	59	51	53·64	329	47	231	61·94	27	2	2,909	0·99
8	(*g*) to (*k*)		Rajputana-Malwa	...	438	...	...	...	1,676	...	...	...	7,071	...
9	(*c*)		Hyderabad-Godavari Valley	...	54	...	...	...	131	...	...	...	814	...
10	(*d*) & (*e*)		Nilgiri and Shoranur Cochin	4	5	44·44	8	...	34	19·05	20	...	119	14·39
12	...		Bengal Dooars	...	10	...	...	...	72	...	...	...	314	...
13	...		Dibru-Sadiya	...	22	...	...	...	80	...	...	...	898	...
14	...		Assam Bengal	44	9	83·02	193	...	13	93·69	2	...	1,465	0·14
15	...		Deoghur	...	4	...	...	...	12	...	...	...	8	...
16	...		Bengal and North-Western	7	175	3·85	...	...	838	...	...	...	5,849	...
17	(*a*) & (*b*)		Rohilkund and Kumaon	...	31	...	...	...	158	...	...	...	1,063	...
18	...		Jodhpur-Bikaner	...	44	...	...	...	183	...	...	...	833	...
19	...		Udaipur-Chitor	...	3	...	...	...	26	...	...	...	35	...
20	...		Bhavnagar-Gondal-Junagad-Porbandar	...	37	...	...	...	264	...	...	...	1,003	...
21	...		Southern-Mahratta	...	231	...	...	...	1,053	...	...	...	4,840	...
22	...		South Indian	25	189	11·68	143	25	822	16·97	...	...	3,317	...
23	...		Burma	104	105	49·76	255	46	559	35·00	94	5	4,175	2·32
2	(*e*)	2′ 6″	Cooch Behar*	...	13	...	...	...	49	...	..	...	261	...
4	(*b*)		Raipur-Dhamtari	...	4	...	...	...	22	...	...	...	75	...
4	(*c*)		Parlakimedi	...	3	...	...	...	8	...	...	...	16	...
6	(*f*) & (*g*)		Khushalgarh-Kohat-Thal and Nowshera-Durgai†	...	11	...	...	...	21	...	...	...	115	...
8	(*l*) & (*m*)		Gaekwar's Dabhoi and Rajpipla	...	11	...	...	...	54	...	...	...	215	...
17	(*c*)		Powayan	...	5	...	...	...	18	...	...	...	70	...
24	...		Morvi	...	8	...	...	...	54	...	...	...	104	...
25	...		Barsi	...	4	...	...	...	7	...	...	...	61	...
26	...		Tarakeshwar-Magra	...	4	...	...	...	25	...	...	...	35	...
27	...		Ranaghat-Krishnagar	...	2	...	...	...	14	...	...	...	8	...
28	...		Tezpur Balipara	...	3	...	...	...	13	...	...	...	50	...
6	(*h*)	2′ 0″	Dandot	...	7	...	...	...	...	...	...	...	326	...
7	(*h*)		Gwalior	...	11	...	...	...	41	...	...	...	183	...
29	...		Darjeeling-Himalayan	...	14	...	...	...	88	...	...	...	212	...
30	...		Howrah-Amta	...	7	...	...	...	56	...	...	...	33	...
31	...		Howrah-Sheakhala	...	4	...	...	...	19	...	...	...	8	...
32	...		Jorhat	...	7	...	...	...	10	...	...	...	75	...
33	...		Thaton-Duyinzaik‡	...	...	...	...	...	...	...	...	...	...	...
			Total	2,005	3,109	39·21	8,285	574	10,123	49·27	769	436	97,824	1·22

* Excludes the Kaunia-Dharlla and the British section of the Cooch Behar-Santrabari extension, 2′ 6″ gauge line particulars of which are included with the Cooch Behar railway.
† Information for the Khushalgarh-Kohat-Thal railway is not available.
‡ Information not available.

APPENDIX 36.

Rolling-stock lighted by gas.

(Referred to in paragraph 52 of Report.)

Class: No. Main.	Class: No. Sub.	Gauge.	Railways.	Number of coaching vehicles fitted.	Number of coaching vehicles not fitted.	Proportion per cent. of fitted to total.	Remarks.
1	...	5′ 6″	East Indian	1,198*	467	71·95	* Includes 3 carriages fitted with electricity.
2	(*a*)		Eastern Bengal	407	46	89·85	
3	...		Bengal Central	...	117	...	
4	(*a*)		Bengal-Nagpur	485†	180	72·93	† Includes 1 carriage fitted with electricity.
5	(*a*) & (*b*)		Oudh and Rohilkhand	598	204	74·56	
6	(*a* to *e*)		North Western	1,108	982	53·01	
7	(*a*) to (*c*)		Great Indian Peninsula	981	71	93·25	
7	(*d*) to (*g*)		Indian Midland	259	133	66·07	
8	(*a*) to (*f*)		Bombay, Baroda and Central India	404	14	96·65	
9	(*a*) & (*b*)		Nizam's Guaranteed State	121	61	66·48	
10	(*a*) to (*c*)		Madras	751	317	70·32	
2	(*b*) to (*d*)	3′ 3¾″	Eastern Bengal	402	11	97·34	
8	(*g*) to (*k*)		Rajputana-Malwa	76	1,603	4·53	
9	(*c*)		Hyderabad-Godaveri Valley	81	50	61·83	
10	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	...	42	...	
12	...		Bengal Dooars	...	72	...	
13	...		Dibru-Sadiya	...	80	...	
14	...		Assam-Bengal	171	7	96·07	
15	...		Deoghur	...	12	...	
16	...		Bengal and North-Western	...	838	...	
17	(*a*) & (*b*)		Rohilkund and Kumaon	...	158	...	
18	...		Jodhpur-Bikaner	...	183	...	
19	...		Udaipur-Chitor	...	26	...	
20	...		Bhavnagar-Gondal-Junagad-Porbandar	...	264	...	
21	...		Southern Mahratta	934	32	96·68	
22	...		South Indian	91	808	10·12	
23	...		Burma	13	647	1·97	
2	(*e*)	2′ 6″	Cooch Behar‡	...	49	...	‡ Includes the Kannia-Dharla and Cooch Behar-Santrabari extension, British section, 2′ 6″ gauge, lines.
4	(*b*)		Raipur-Dhamtari	...	22	...	
4	(*c*)		Parlakimedi	...	8	...	
6	(*f*) & (*g*)		Khushalgharh-Kohat-Thal and Nowshera-Durgai	...	§21	...	§ Information for the Khushalgarh-Kohat-Thal railway is not available.
8	(*l*) & (*m*)		Gaekwar's Dabhoi and Rajpipla	...	54	...	
17	(*c*)		Powayan	...	18	...	
24	...		Morvi	...	54	...	
25	...		Barsi	...	7	...	
26	...		Tarakeshwar-Magra	...	25	...	
27	...		Ranaghat-Krishnagar	...	14	...	
28	...		Tezpur-Balipara	...	13	...	
7	(*h*)	2′ 0″	Gwalior	...	41	...	
29	...		Darjeeling-Himalayan	...	88	...	
30	...		Howrah-Amta	...	56	...	
31	...		Howrah-Sheakhala	...	19	...	
32	...		Jorhat	...	10	...	
33	...		Thaton-Duyinzaik‖	...	...	...	‖ Information not available.

Appendix 37.

APPENDIX 37.

Interlocking and train signalling.

Railways on which points and signals are interlocked and on which block instruments are used for train signalling at close of 1902.

(Referred to in paragraph 53 of Report.)

Class: No. Main.	Class: No. Sub.	Gauge.	Railway.	Total number of stations on railway.	Stations at which points and signals are interlocked. No.	Stations at which points and signals are interlocked. Name of system of interlocking.	Stations at which block instruments are used for train signalling. No.	Stations at which block instruments are used for train signalling. Name of block instrument.
1	...	5′ 6″	East Indian	380	94	55 English system 32 Saxby and Farmer's 7 Experimental	76	43 Pryce and Ferreira. 33 Tyer's Tablet.
2	(a)	5′ 6″	Eastern Bengal	83	15	9 Mackenzie and Holland's. 6 Experimental	...	.....
3	...	5′ 6″	Bengal Central	27	...	...	...	.....
4	(a)	5′ 6″	Bengal-Nagpur	218	87	86 List and Morse's 1 Experimental	*12	7 Webb and Thomson's. 5 Experimental.
5	(a) & (b)	5′ 6″	Oudh and Rohilkhand	156	74	68 List and Morse's 6 Experimental	...	.....
6	(a) to (e)	5′ 6″	North Western	500	224	180 List and Morse's 22 Tappet 19 Key locking 3 Experimental	...	.....
7	(a) to (c)	5′ 6″	Great Indian Peninsula	232	28	26 Saxby and Farmer's 2 Tappet	232†	Preece's single wire semaphore.§
7	(d) to (g)	5′ 6″	Indian Midland	145	13	11 Wrench's 2 Experimental	14	Preece's.§
8	(a) to (f)	5′ 6″	Bombay, Baroda and Central India	129	25	16 Mackenzie and Holland's. 9 Experimental	76	68 Preece's single wire semaphore.§ 8 Syke's.
9	(a) & (b)	5′ 6″	Nizam's Guaranteed State	39	1	Dutton's	...	.....
10	(a) to (c)	5′ 6″	Madras	264	51	37 List and Morse's 14 Experimental	136	103 Winter's Block with starting semaphores.§ 20 Winter's Block without starting semaphores.§ 13 Theobald's Train Key.
2	(b) to (e)	5′ 6″	Eastern Bengal	122	18	17 List and Morse's 1 Tappet 2 Dutton's	2	Tyer's Tablet.
8	(g) to (k)	5′ 6″	Rajputana-Malwa	256	8	1 Mackenzie and Holland's. 5 Country made	3	Syke's.
9	(c)	5′ 6″	Hyderabad-Godavari Valley	47	37	36 List and Morse's 1 Experimental	...	.....
10	(d) & (e)	5′ 6″	Shoranur-Cochin and Nilgiri	20	...	.....	12	6 Winter's Block with starting semaphores.§ 6 Theobald's Train Key.
12	...	3′ 3⅜″	Bengal-Dooars	28	...	.....	...	.....
13	...	3′ 3⅜″	Dibru-Sadiya	17	...	.....	...	.....
14	...	3′ 3⅜″	Assam-Bengal	83	...	.....	...	.....
15	...	3′ 3⅜″	Deoghur	1	...	.....	...	.....
16	...	3′ 3⅜″	Bengal and North-Western	208	...	.....	...	.....
17	(a) & (b)	3′ 3⅜″	Rohilkund and Kumaon	46	...	.....	...	.....
18	...	3′ 3⅜″	Jodhpur-Bikaner	83	...	.....	...	.....
19	...	3′ 3⅜″	Udaipur-Chitor	7	...	.....	...	.....
20	...	3′ 3⅜″	Bhavnagar-Gondal-Junagad-Porbandar	64	1	Experimental	...	.....
21	...	3′ 3⅜″	Southern Mahratta	225	...	.....	104	96 Winter's.§ 4 Theobald's Train Key. 4 Webb and Thomson's.
22	...	3′ 3⅜″	South Indian	209	7	6 Dutton's 1 Saxby and Farmer's	21	Winter's Ticket issuing.
23	...	3′ 3⅜″	Burma	186	2	1 Dutton's 1 Saxby and Farmer's	...	.....
4	(b)	2′ 6″	Raipur-Dhamtari	8	...	.....	...	.....
4	(c)	2′ 6″	Parlakimedi	6	...	.....	...	.....
6	(f) & (g)	2′ 6″	Khushalgarh-Kohat-Thal and Nowshera-Durgai	22	...	.....	...	.....
8	(i) & (m)	2′ 6″	Gaekwar's Dabhoi and Rajpipla	25	1	Country made	...	.....
17	(c)	2′ 6″	Powayan	8	...	.....	...	.....
24	...	2′ 6″	Morvi	12	...	.....	...	.....
25	...	2′ 6″	Barsi	4	...	.....	...	.....
26	...	2′ 6″	Tarakeshwar-Magra	13	...	.....	...	.....
27	...	2′ 6″	Ranaghat-Krishnagar	8	...	.....	...	.....
28	...	2′ 6″	Tezpur-Balipara	8	...	.....	...	.....
7	(h)	2′ 0″	Gwalior	10	...	.....	...	.....
29	...	2′ 0″	Darjeeling-Himalayan	11	...	.....	...	.....
30	...	2′ 0″	Howrah-Amta	14	...	.....	...	.....
31	...	2′ 0″	Howrah-Sheakhala	10	...	.....	...	.....
32	...	2′ 0″	Jorhat	7	...	.....	...	.....
33	...	2′ 0″	Thaton-Duyinzaik	2	...	.....	...	.....
			Total	3,943	686	.....	688	

* At Khargpur station 3 different kinds of instruments are used.
† At 21 stations 2 kinds of instruments are in use.
§ These systems do not give out a token or tablet.

APPENDIX 38.

Accidents and casualties to trains on railways treated as one System during the Calendar years 1901 and 1902.

(Referred to in paragraph 54 of Report.)

Description.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, *i.e.*, serious accidents.		Other accidents.		Total number of accidents.		Number of passengers and others.				Number of servants.				Total of all classes.			
							Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
1. Collisions between passenger trains or parts of passenger trains	6	4	2	3	8	7	...	...	5	32	...	...	...	1	...	...	5	33
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line	31	39	22	34	53	73	1	2	29	53	2	7	22	30	3	9	51	83
3. Collisions between goods trains or parts of goods trains	14	11	66	33	80	44	...	...	*1	...	...	11	6	29	...	11	7	29
4. Collisions between light engines	1	1	18	43	19	14	...	...	...	...	...	...	5	1	...	...	5	1
5. Passenger trains or parts of passenger trains leaving the rails	67	72	47	62	114	134	...	31	...	37	...	...	...	5	...	31	...	42
6. Goods trains or parts of goods trains, engines, etc, leaving the rails	4	7	202	231	206	238	...	...	...	...	1	1	6	5	1	1	6	5
7. Trains or engines travelling in the wrong direction through points	10	11	124	95	134	106	...	...	...	†1	1	1	9	3	1	1	9	10
8. Trains running into stations or sidings at too high a speed.	1	3	34	27	35	30	...	...	2	10	...	...	...	1	...	...	2	11
9. Trains running over cattle on the line	9	14	2,437	2,469	2,446	2,483	*1	*3	*2	*5	1	...	...	1	2	3	2	6
10. Trains running over obstructions on the line	11	19	162	121	173	140	†3	*2	‡7	*4	...	...	2	2	3	2	9	6
11. Trains running through gates at level-crossings	...	3	49	32	49	35	...	*1	...	...	...	...	...	1	...	1	...	1
12. The bursting of boilers of engines	...	...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
12. (*a*) The bursting of tubes, etc., of engines	...	...	263	313	263	313	...	...	...	...	1	...	1	...	1	...	1	...
13. The failure of machinery, springs, etc., of engines	5	3	701	752	706	755	...	...	...	...	1	...	...	1	1	...	...	1
14. The failure of tyres	...	1	23	4	23	5	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	...	...	4	5	4	5	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	17	18	57	53	74	71	...	...	...	...	...	...	1	...	...	...	1	...
17. Ditto of brake apparatus	1	...	7	6	8	6	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	3	4	352	340	355	344	...	6	§4	15	1	4	9	4	1	10	13	19
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	1	2	2	2	3	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	3	1	172	207	175	208	...	...	...	...	...	...	1	...	...	...	1	...
21. The flooding of portions of permanent-way	29	29	65	91	94	120	...	75	...	6	...	4	...	...	...	79	...	6
22. Slips in cuttings or embankments	7	10	33	52	40	62	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains	4	4	215	215	219	219	1	...	6	...	3	...	16	...	4	...	22	...
24. Fire at stations, or involving injury to bridges or viaducts	3	8	62	73	65	81	*5	†7	...	†1	...	4	...	...	5	11	...	1
25. Other accidents	23	23	633	632	656	655	*5	13	*5	§27	3	5	5	11	8	18	10	38
TOTAL	249	286	5,753	5,866	6,002	6,152	‖16	‖140	¶61	‖197	14	37	83	95	30	177	144	292

* Not passengers.
† Of these, two were not passengers.
‡ Of these, five were not passengers.
§ Of these, one was not a passenger.
‖ Of these, thirteen were not passengers.
¶ Of these, fourteen were not passengers.

Appendix 39.
Railway Servants and Provident Fund.

Numerical Return of Servants of all races employed on each railway (open lines only) and

(Referred to in paragraphs

Class: No.		Railway.	Number of servants employed.							
			European.		Eurasian.		Natives.		Total.	
Main.	Sub.		1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
1	...	East Indian	1,468	1,512	954	956	66,960	74,554	69,382	77,022
2	...	Eastern Bengal State	283	284	361	410	19,634	21,460	20,278	22,154
3	...	Bengal Central	10	8	15	14	1,551	1,461	1,576	1,483
4	...	Bengal-Nagpur	292	313	649	587	16,072	16,783	17,013	17,683
5	...	Oudh and Rohilkhand State	230	266	237	208	§15,696	16,717	16,159	17,191
6	...	North Western State	769	810	633	647	51,584	52,437	52,986	53,894
7	...	Great Indian Peninsula	862	969	886	950	47,756	53,705	49,504	55,624
8	(*a*) to (*e*) and (*l*) and (*m*)	Bombay, Baroda and Central India	218	209	230	254	12,854	13,616	13,302	14,079
8	(*f*) to (*k*)	Rajputana-Malwa	445	451	537	549	24,039	24,216	25,021	25,216
9	...	Nizam's Guaranteed State	§79	88	§362	391	§7,671	7,505	§8,112	7,984
10	...	Madras	215	243	1,381	1,472	19,930	20,880	21,526	22,595
12	...	Bengal Dooars	4	4	4	5	752	808	760	817
13	...	Dibru-Sadiya	16	9	...	...	925	895	935	904
14	...	Assam-Bengal	56	53	108	121	4,941	5,127	5,105	5,301
15	...	Deoghar	...	...	1	*	§58	59	§59	60
16	...	Bengal and North-Western	133	155	174	188	14,284	18,028	14,591	18,371
17	...	Rohilkund and Kumaon	26	26	18	16	3,481	3,326	3,525	3,368
18	...	Jodhpur-Bikaner	11	13	3	3	2,938	3,108	2,952	3,124
19	...	Udaipur-Chitor	2	2	...	...	387	358	389	360
20	...	Bhavnagar-Gondal-Junagad-Porbandar	19	14	25	24	2,530	2,588	2,574	2,626
21	...	Southern Mahratta	178	175	395	396	13,179	13,414	13,752	13,985
22	...	South Indian	96	104	604	578	11,834	12,565	12,534	13,247
23	...	Burma	60	155	580	484	11,404	12,038	12,044	12,657
24	...	Morvi	1	1	1	1	579	503	581	505
25	...	Barsi	1	1	2	2	186	185	189	188
26	...	Tarakeshwar-Magra	...	...	1	*	199	201	200	202
27	...	Ranaghat-Krishnagar	1	2	1	...	115	104	117	106
28	...	Tezpur-Balipara	2	2	2	2	178	176	182	180
29	...	Darjeeling-Himalayan	20	20	10	8	802	936	832	964
30	...	Howrah-Amta	3	3	1	1	386	317	390	321
31	...	Howrah-Sheakhala	1	1	...	...	190	110	191	111
32	...	Jorhat	2	2	...	...	183	193	185	195
		Total	5,493	5,875	8,175	8,269	353,278	378,373	366,946	392,517

* The number under "Voluntary" represents subscribers over 5 per cent.
† Approx
‡ Information
§ Revised
‖ Excludes bonuses for the

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1902.

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Amounts deposited in Provident Fund.						Railway.	Class; No.	
Number of depositors.		Amount at their credit on 31st December 1902, in rupees.						
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by Railway.	Total to depositors' credit.		Main.	Sub.
*†6,455	*†9,062	‡	‡	‡	†1,12,78,547	East Indian	1	...
109	4,202	20,694	9,47,554	8,35,246	18,03,494	Eastern Bengal State	2	...
...	337	...	69,357	27,339	96,696	Bengal Central	3	...
119	2,801	26,455	6,13,129	‖4,23,868	10,63,452	Bengal-Nagpur	4	...
99	1,248	25,088	6,31,090	5,14,776	11,70,954	Oudh and Rohilkhand	5	...
323	6,893	80,749	25,39,579	22,54,898	48,75,226	North Western State	6	...
44	7,000	6,140	69,96,243	...	70,02,383	Great Indian Peninsula	7	...
...	2,759	...	16,39,473	12,66,983	29,06,456	Bombay, Baroda and Central India.	8	(*a*) to (*e*) and (*l*) and (*m*).
283	3,488	63,093	13,72,312	12,61,563	26,96,968	Rajputana-Malwa	8	(*f*) to (*k*).
...	1,160	...	3,59,131	2,97,551	6,56,682	Nizam's Guaranteed State	9	...
74	5,180	81,026	11,61,271	8,99,466	21,41,763	Madras	10	...
...	99	...	†3,527	9,232	22,759	Bengal Doars	12	...
...	...	...	...	...	...	Dibru-Sadiya	13	...
...	844	...	1,08,065	64,067	†1,72,132	Assam-Bengal	14	...
...	...	...	...	...	...	Deoghur	15	...
†6	†1,935	†1,285	†5,65,530	†5,11,860	†10,78,695	Bengal and North-Western	16	...
3	432	192	1,15,055	97,729	2,12,976	Rohilkund and Kumaon	17	...
30	335	3,589	45,420	39,208	88,217	Jodhpur-Bikaner	18	...
...	35	...	3,604	1,927	5,531	Udaipur-Chitor	19	...
150	461	36,886	1,88,828	1,32,923	3,58,637	Bhavanagar-Gondal-Junagad-Porbandar.	20	...
...	3,149	...	8,73,389	4,02,598	12,75,987	Southern Mahratta	21	...
11	2,240	6,640	7,56,112	4,57,042	12,19,794	South Indian	22	...
...	2,207	...	5,58,126	4,37,570	9,95,696	Burma	23	...
...	...	...	...	...	...	Morvi	24	...
...	...	...	...	...	...	Barsi	25	...
...	...	...	...	...	...	Tarakeshwar-Magra	26	...
...	24	...	637	261	898	Ranaghat Krishnagar	27	...
...	...	...	...	...	...	Tezpur-Balipara	28	...
...	128	...	1,17,706	65,037	1,82,743	Darjeeling-Himalayan	29	...
...	97	...	4,686	1,444	6,130	Howrah-Amta	30	...
...	19	...	704	383	1,087	Howrah-Sheakhala	31	...
4	22	402	3,871	1,904	6,177	Jorhat	32	...
7,710	57,157	3,52,239	1,96,84,419	1,00,04,875	4,13,20,080	Total.		

and that under "Compulsory" subscribers of 5 per cent. only.
imate.
not furnished.
figures.
second-half of the year.

Appendix 40.
Volunteers.

APPENDIX 40.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1902.

(Referred to in paragraph 58 of Report).

Classification Number.		Corps.	ENROLLED STRENGTH.					Total number of European and Eurasian employés on railway.	Sergeant Instructors furnished by the Army.	Remarks.
			Efficients.			Non-efficients.	Total number of volunteers in Corps.			
Main.	Sub.		Officers.	Non-Commissioned officers.	Volunteers.					
1	...	East Indian	63	164	1,823	46	2,096	2,468	17	
2	...	Eastern Bengal State	10	40	400	207	657	694	4	
4	...	Bengal-Nagpur	32	126	894	10	*1,061	900	8	* Includes Portuguese, Armenians, etc., and men on construction works.
5	...	Oudh and Rohilkhand State—								
		Oudh Volunteer Rifles	10	64	337	...	411	474	5	
6	...	North Western State—								
		Third Punjab (North Western State railway) Volunteer Rifles	59	126	1,020	8	1,213	1,457	12	
7	(*a*) to (*c*)	Great Indian Peninsula—								
		First Battalion, Great Indian Peninsula Railway Volunteer Rifles	27	131	804	2	964	1,919	10	
7	(*d*) to (*h*)	Indian Midland—								
		Second Battalion, Great Indian Peninsula Railway Volunteer Rifles	11	46	386	17	460		3	
8	(*a*) to (*c*) and (*l*) and (*m*).	Bombay, Baroda and Central India—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	16	94	507	5	†622	463	5	†Includes 272 Goanese and 30 Jews.
8	(*f*) to (*k*)	Rajputana-Malwa—								
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	33	94	681	5	813	1,000	10	
9	...	Nizam's Guaranteed State—								
		Hyderabad Volunteer Rifles	9	32	213	2	256	479	3	
10	...	Madras	35	105	807	79	1,026	1,715	11	
14	(*a*)	Assam-Bengal	11	17	155	...	‡183	174	2	‡ Includes 12 employés on construction works not included with European and Eurasian employés.
16	...	Bengal and North-Western—								
		Gorakhpur Volunteer Rifles	16	37	280	10	343	343	6	
17	...	Rohilkund and Kumaon—								
		Rohilkund Volunteer Rifles	1	1	14	...	16	42	...	
19	...	Udaipur-Chitor—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	...	1	...	...	1	2	...	
20	...	Bhavnagar-Gondal-Junagad-Porbandar—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	2	9	19	...	30	38	1	
21	...	Southern Mahratta	18	103	515	...	§636	571	7	§ Includes 142 Goanese.
22	...	South Indian	6	62	283	202	553	682	8	
23	...	Burma	22	53	585	10	‖670	619	9	‖ Includes 51 Karens.
24	...	Morvi—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	...	...	2	...	2	2	...	
26	...	Tarakeshwar-Magra	...	...	1	...	1	1	...	
29	...	Darjeeling-Himalayan—								
		Northern Bengal Mounted Rifles, "A" and "B" Troops	...	...	7	1	8	28	...	
			380	1,305	9,733	604	12,022	14,071	121	

N.B.—European and Eurasian employés on railways which have no volunteer corps are excluded from this statement

APPENDIX 41.

Strength and cost of the Police force on each Railway (open lines), and the amount of compensation payments on account of claims for goods traffic for the Calendar year 1902.

(Referred to in paragraph 59 of Report.)

Class: No.		Railway.	Subordinate officers.	Constables and men.	Portion of the total annual cost borne by the Railway.				Cost of force to the railway per mile open.	Compensation payments on account of claims for goods traffic.	Remarks.
Main.	Sub.				Supervision.	Constables and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	...	East Indian	64	1,988	57,667	1,18,769	38,292	2,14,728	98·98	1,58,274	
2	...	Eastern Bengal State	77	720	635	44,907	106	45,648	44·80	8,386	
3	...	Bengal Central	3	24	4,392	5,062	350	9,804	78·43	963	
4	...	Bengal-Nagpur	10	478	13,927	38,848	4,538	57,313	35·78	8,130	
5	...	Oudh and Rohilkhand State	3	490	5,680	33,758	2,926	42,364	37·37	25,677	
6	...	North Western State	...	1,357	...	1,23,614	1,051	1,24,665	33·08	29,669	
7	...	Great Indian Peninsula	36	1,285	57,077	1,16,640	16,737	1,90,454	68·16	81,662	
8	(a) to (e) & (k) & (l).	Bombay, Baroda and Central India.	65	492	22,618	56,849	9,024	88,491	110·74	36,323	
8	(f) to (j)	Rajputana-Malwa	139	682	35,068	84,364	13,663	1,33,095	62·37	56,973	
9	...	Nizam's Guaranteed State	3	391	8,381	22,894	1,051	32,326	43·37	...	
10	...	Madras	21	518	14,687	51,297	7,162	73,146	49·63	9,813	
12	...	Bengal Dooars	...	3	...	1,173	...	1,173	10·28	1,302	
14	...	Assam-Bengal	3	174	3,063	13,404	1,096	17,563	29·80	653	
16	...	Bengal and North-Western	8	536	2,719	48,192	3,948	54,859	43·38	15,232	
17	(a) & (b).	Rohilkund and Kumaon	11	139	1,624	10,986	1,482	14,092	49·43	2,477	
18	...	Jodhpur-Bikaner	1	38	1,663	3,350	213	5,226	6·34	5,171	
20	...	Bhavnagar-Gondal-Junagad-Porbandar.	25	136	16,787	12,026	6,390	35,203	77·29	861	
21	...	Southern Mahratta	13	668	15,876	69,522	5,744	91,142	57·14*	1,661	
22	(a) (b) & (c).	South Indian	...	214	...	59,946	...	59,946†	48·50	1,606	
23	...	Burma	84	382	13,793	72,371	8,629	94,793	75·20	2,996	
24	...	Morvi	3	12	772	1,232	596	2,600	27·55	174	
25	...	Barsi	1	4	...	716	24	740	34·27	5,120	

* Excludes the West of India Portuguese railway, where the Company does not pay for the police.

† Including cost of Government supervision, Rs. 46,471.

Appendix 42.
Fine Funds.

APPENDIX 42.

Transactions of the Fine Funds for the Calendar year 1902.

(Referred to in paragraph 61 of Report.)

Class: No.		Railway.	Assets.				Disbursements.						Balance in hand on 31st December 1902.
Main.	Sub.		Balance on 31st December 1901.	Fines and bonus forfeited during 1902.	Interest on balance.	Total.	Hospitals for sick employés.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	East Indian	*63,679	18,129	2,465	84,273	...	30	2,685	3,200	500	6,415	77,858
2	...	Eastern Bengal	4,607	12,534	184	17,325	...	809	2,279	3,680	2,003	8,771	8,554
3	...	Bengal Central	4,542	1,242	132	5,916	...	486	...	...	1,607	2,093	3,823
4	...	Bengal-Nagpur	11,060	10,528	...	21,588	...	...	310	2,084	4,423	6,817	14,771
5	...	Oudh and Rohilkhand	29,810	5,206	910	35,926	...	173	4,102	†—189	6,334	10,420	25,506
6	...	North Western	*2,077	15,866	8,290	26,233	100	695	5,000	4,665	1,825	12,285	13,948
7	...	Great Indian Peninsula	15,524	18,220	791	34,535	...	5,504	2,156	4,304	15,253	27,217	7,318
8	(a) to (e) & (l) & (m)	Bombay, Baroda and Central India	*13,861	2,658	467	16,986	100	632	795	997	2,412	4,936	12,050
9	...	Nizam's Guaranteed State	2,921	3,436	125	6,482	330	60	840	...	353	1,583	4,899
10	...	Madras	1,00,937	5,532	3,187	1,09,656	30	1,355	31	315	2,103	3,834	1,05,822
12	...	Bengal Dooars	1,104	467	29	1,600	...	...	...	50	3	53	1,547
14	...	Assam-Bengal	*6,475	3,613	...	10,088	...	148	300	71	80	599	9,489
16	...	Bengal and North Western	35,252	23,449	...	58,701	...	78	...	2,837	1,112	4,027	54,674
17		Rohilkund and Kumaon	1,534	—1,493	25	66	...	...	...	...	...	...	66
18	(f) to (k).	Rajputana-Malwa	*57,499	9,067	1,813	68,379	...	1,635	2,697	...	2,910	7,242	61,137
19	...	Jodhpur-Bikaner	405	1,597	...	2,002	...	...	...	...	39	39	1,963
19	...	Udaipur-Chitor	352	78	...	430	...	...	...	...	...	...	430
20	...	Bhavnagar-Gondal-Junagad-Porbandar	5,376	1,163	155	6,694	...	...	554	88	3	645	6,049
21	...	Southern Mahratta	206	3,550	...	3,756	130	...	991	180	1,542	2,843	913
22	...	South Indian	*1,58,303	7,806	5,155	1,71,264	...	662	...	29,681	1,022	31,365	1,39,899
23	...	Burma	*3,128	17,966	...	21,094	...	...	2,286	6,900	1,652	10,838	10,256
24	...	Morvi	939	172	...	1,111	...	200	...	...	...	200	911
26	...	Tarakeshwar-Magra	9	58	...	67	67	...	...	...	...	67	...
29	...	Darjeeling-Himalayan	155	17	...	172	...	...	...	...	...	...	172
32	...	Jorhat	134	72	3	209	...	...	...	...	...	...	209

*Revised figures.
†Due to the value of stores returned to stock.

APPENDIX 43.

Railway and Railway aided Schools at the close of the Calendar year 1902.

(Referred to in paragraph 62 of Report.)

N.B.—A reference to appendix 2 will furnish the key to the code letters used to denote railway systems.

Class: No. Main.	Class: No. Sub.	Railway.		RAILWAY SCHOOLS. Number of Schools.	Attendance. Children. Number on the rolls.	Attendance. Children. Average daily attendance.	Attendance. Apprentices and workmen. Number on the rolls.	Attendance. Apprentices and workmen. Average daily attendance.	Annual Contributions. By Railway. By Government.	By Railway. From Revenue.	By Railway. From Fine Fund.	By School fees.	Total.	Annual expenditure	LOCAL AND DISTRICT SCHOOLS. Number of Schools.	Average daily attendance. Children.	Average daily attendance. Apprentices and workmen.	Annual Railway Grant. From Revenue.	Annual Railway Grant. From Fine Fund.
									Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.
1	...	E. I.	European	*16	774	687	55	45	11,487	†32,173	...	77,656	1,21,316	98,448	2	146	...	1,896	...
			Native	29	1,654	1,015	1,791	972	3,264	‡3,302	2,685	19,483	28,734	27,767	...	...	...	...	...
2	...	E. B. S.	European	...	...	...	...	...	...	...	...	...	...	...	3	27	8	1,554	1,554
			Native	4	96	78	223	80	...	932	...	...	932	932	10	450	...	725	725
4	...	B. N.	European	5	159	124	...	...	940	3,350	...	2,362	6,652	6,298	4	104	...	900	...
			Native	3	186	157	...	...	99	1,104	310	837	2,350	2,449	...	...	...	...	...
5	...	O. and R.	European	5	54	49	35	26	435	1,386	1,803	1,002	4,626	3,624	17	52	...	5,337	§758
			Native	3	...	...	194	85	...	319	71	...	390	390	2	85	...	...	450
6	...	N. W.	European	2	46	32	24	12	1,438	1,502	§283	625	3,848	3,593	16	270	...	11,443	§2,157
			Native	23	111	96	1,267	38	...	5,832	...	238	6,070	5,093	2	76	...	1,326	§259
7	(a) to (e).	G. I. P.	European	6	242	185	...	...	3,005	‖1,451	1,041	2,251	‖7,748	‖7,748	‖ 13	¶	¶	6,033	190
			Native	...	...	...	...	...	...	...	...	...	...	...	1	¶	¶	240	...
	(f) to (j).	I. M.	European	2	78	50	...	...	...	3,259	925	682	4,866	4,866	...	...	...	...	...
			Native	...	...	...	...	...	...	...	...	...	...	...	1	¶	¶	240	...
8	(a) to (e) and (k) and (l).	B., B. & C. I. European.		**4	108	82	21	18	879	4,680	795	1,638	7,992	9,083	18	49	...	3,319	...
	(f) to (j).	R. M.	European	11	470	246	88	75	2,478	17,063	1,401	12,348	33,290	33,305	1	38	...	180	...
			Native	2	...	...	51	44	...	300	140	...	440	440	5	388	...	924	1,156
9	...	N. G. S.	European	1	39	27	...	...	...	1,261	...	409	1,670	1,153	3	137	...	240	504
			Native	1	36	29	9	5	...	1,164	...	26	1,190	756	3	171	...	...	336
10	...	M.,	European	8	338	274	...	...	2,212	13,083	18	3,330	18,643	19,727	5	¶	¶	703	13
12	...	D. S.,	Native	1	159	105	...	...	...	300	...	1,052	1,352	1,734	...	...	...	...	...
15	...	B. & N. W.,	European	2	44	37	...	...	730	1,604	...	508	2,842	2,909	2	56	...	324	...
19	...	B. G. J. P.	European	1	16	7	...	...	86	996	218	131	1,431	809	...	...	...	...	...
			Native	1	45	33	...	...	...	350	336	78	764	506	...	...	...	...	...
20	...	S. M.	European	8	257	183	...	...	751	4,978	...	1,682	7,411	7,833	7	¶	¶	...	730
			Native	8	39	29	189	96	...	973	180	90	1,243	1,239	4	¶	¶	...	81
22	...	S. I.	European	4	165	135	...	...	681	4,114	...	954	5,749	4,329	...	...	...	...	...
			Native	1	40	45	...	...	...	325	...	148	473	327	...	...	...	...	...
23	...	B.	European	3	61	53	6	4	1,873	414	685	1,332	4,304	3,528	13	37	...	324	324
			Native	2	180	132	30	23	2,009	820	906	2,153	4,178	3,560	13	36	...	281	281
		TOTAL		156	5,397	3,890	3,983	1,503	31,367	2,17,035	11,897	1,30,215	2,90,504	2,62,446	144	2,172	8	35,989	10,538

* Includes the joint railway schools at Aligarh, Moghal Sarai and Ghaziabad.

† Includes Rs. 380 received from the North Western State railway for the joint railway school at Ghaziabad, Rs. 275 and Rs. 183 received from the Oudh and Rohilkhand State railway for the joint railway schools at Aligarh and Moghal Sarai and Rs. 13,585 received from the North Western State railway for Oakgrove School, Mussoorie.

‡ Includes Rs. 74 received from the Oudh and Rohilkhand State railway for the joint railway school at Moghal Sarai.

§ In addition to these grants from the Fine Fund, the North Western State railway also subscribed Rs. 2,301 from the Fine Fund for the Oakgrove and Ghaziabad schools, particulars of which are included with the East Indian railway schools.

‖ Includes 10 schools for Europeans and Natives.

¶ Information not furnished.

** Includes an apprentice class for Europeans and Natives.

Appendix 44.
Earnings under different heads.

APPEN

Gross earnings under different heads of each

Serial No.	GAUGE.		5' 6"					
	CLASS: No.		1		2		3	
	Railway.		East Indian.		Eastern Bengal State.		Bengal Central.	
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
	COACHING.							
1	1st class	Number	33,397	39,576	20,254	19,487	958	1,159
2		Earnings Rs.	3,36,078	4,59,679	97,755	78,393	3,502	3,515
3	2nd class	Number	100,408	114,694	59,681	57,438	8,638	9,695
4		Earnings Rs.	4,13,447	5,10,220	1,15,267	1,11,524	3,819	11,108
5	3rd or Intermediate class	Number	819,304	801,191	521,285	529,007	30,915	32,977
6		Earnings Rs.	7,72,818	8,35,357	2,47,462	2,68,917	20,983	23,020
7	4th or Lowest class	Number	10,452,145	9,332,040	5,683,150	5,518,724	820,871	793,790
8		Earnings Rs.	78,45,802	75,94,287	23,23,950	21,96,773	3,20,900	3,05,327
9	Season tickets of all classes	Number	753,865	809,250	620,173	614,639	102,220	109,980
10		Earnings Rs.	81,365	77,974	82,442	78,827	90,58	9,418
11	Total passengers	Number	12,159,119	11,096,751	6,904,543	6,739,295	963,602	947,601
12		Earnings Rs.	94,49,510	94,77,517	28,66,876	27,34,434	3,64,262	3,52,388
13	Parcels	Earnings Rs.	5,74,028	5,98,978	1,79,716	2,51,237	13,078	16,715
14	Luggage	Earnings Rs.	2,99,316	3,37,800	75,033	1,08,842	12,606	12,526
15	Other coaching traffic	Earnings Rs.	4,82,248	7,14,196	55,920	57,972	3,431	3,539
16	Total Coaching traffic	Earnings Rs.	1,08,05,102	1,11,28,491	31,77,545	31,52,485	3,93,377	3,85,168
	GOODS.							
17	General merchandise	Tons	2,109,116	1,700,738	759,084	885,166	33,187	78,693
18		Earnings Rs.	1,50,99,544	1,23,84,073	39,23,759	60,28,211	98,708	2,86,993
19		Average rate per ton per mile, pies	5·75	5·81	8·99	10·06	8·19	8·31
20	Military stores	Tons	3,252	8,016	201	100	583	1,247
21		Earnings Rs.	1,75,455	1,70,437	617	463	831	2,446
22		Average rate per ton per mile, pies	21·32	20·17	19·36	26·91	136·88	134·73
23	Coal for the public and for foreign railways.	Tons	2,674,280	2,367,865	152,837	142,404	15,195	9,402
24		Earnings Rs.	93,38,566	78,34,030	1,30,552	1,27,486	14,750	11,333
25		Average rate per ton per mile, pies	3·59	3·69	4·85	4·87	3·99	3·91
26	Revenue stores, including coal and materials for construction.	Tons	750,080	865,082	283,443	209,259	10,546	10,341
27		Earnings Rs.	10,57,964	10,17,403	3,20,622	2,45,284	4,587	4,353
28		Average rate per ton per mile, pies	1·87	1·90	2·50	2·45	2·45	2·45
29	Total goods	Tons *	5,536,728	4,941,701	1,195,565	1,236,929	59,511	99,683
30		Earnings † Rs.	2,58,34,085	2,15,41,190	43,96,959	64,55,474	1,19,522	3,05,831
31		Average rate per ton per mile, pies	4·45	4·47	7·39	8·83	6·74	7·78
	SUNDRIES.							
32	Electric telegraph	Earnings Rs.	42,882	47,628	15,519	15,891	943	903
33	Sundries	Earnings Rs.	3,97,148	4,07,208	3,48,703	2,97,405	1,03,911	7,559
34	Total	Earnings Rs.	4,40,030	4,54,836	3,64,222	3,13,296	1,04,854	8,462
35	Steam boat	Earnings Rs.	1,19,440	1,10,553	2,78,648	3,24,885	...	...
	TOTAL.							
36	Grand total, earnings	Rs.	3,71,98,657	3,32,35,070	82,17,374	1,02,46,140	6,17,753	6,99,461
37	Total working expenses ‡	Rs.	1,32,42,328	1,26,37,859	46,53,945	43,41,656	3,58,616	3,84,680
38	Net earnings	Rs.	2,39,56,329	2,05,97,211	35,63,429	59,04,484	2,59,137	3,14,781

* Including revenue stores, but excluding live-stock. † Including all other items not detailed above. ‡ Including special contribution to Provident Fund.

DIX 44.

Appendix 44.
Earnings under different heads.

railway (by systems) during each half-year of 1902.

5′ 6″										
4		5		6		Great Indian Peninsula System.				Serial No.
Bengal-Nagpur. **		Oudh and Rohilkhand State.		North Western State. (*a*) to (*h*)		Great Indian Peninsula. (*a*) to (*c*)		Indian Midland. (*d*) to (*h*)		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
6,500	6,825	16,142	16,387	28,879	28,103	33,987	37,276	6,027	7,638	1
87,521	69,655	87,413	95,080	2,06,592	2,20,446	2,69,783	3,49,076	68,013	1,06,757	2
19,306	19,137	53,186	60,590	95,752	108,629	225,824	207,413	26,234	25,263	3
85,307	86,799	1,28,133	1,54,102	2,58,633	3,02,895	5,06,611	5,28,603	1,00,992	1,26,967	4
79,056	70,039	300,781	315,120	6,6,058	651,458	288,888	274,119	160,046	111,102	5
92,967	91,197	2,06,753	2,27,078	5,64,748	6,34,105	4,70,617	5,05,981	2,16,719	1,32,335	6
3,204,399	2,902,779	4,022,495	3,537,338	9,538,556	9,640,573	6,951,715	5,317,279	1,209,143	1,003,947	7
24,99,311	23,89,748	22,01,692	19,44,166	57,10,391	57,72,115	30,04,236	27,08,854	10,35,762	8,17,049	8
79,220	84,500	...	...	...	...	2,680,140	2,329,320	240	...	9
6,231	7,007	...	...	...	...	1,09,693	98,439	200	...	10
3,383,481	3,083,280	4,382,604	3,949,836	10,329,285	10,492,763	10,183,531	8,165,108	1,401,696	1,147,050	11
27,62,337	26,44,405	26,24,019	24,20,426	67,34,364	69,29,861	43,60,949	41,9 639	14,21,696	12,48,003	12
90,776	1,03,552	1,08,880	1,12,341	3,36,557	5,01,804	6,15,006	5,54,848	1,04,566	89,913	13
70,187	73,360	86,024	85,606	2,37,003	2,53,575	2,32,7 9	2,67,885	72,109	93,895	14
78,352	91,310	1,11,839	1,45,921	3,09,022	3,88,365	2,67,5 0	4,26,217	91,474	2,20,127	15
30,01,652	29,12,647	29,60,762	27,64,261	76,16,946	80,73,605	54,76,205	54,39,603	16,87,845	16,51,938	16
611,569	381,172	800,378	547,520	1,694,173	1,463,315	1,638,779	938,064	572,856	299,241	17
33,83,524	20,34,806	31,77,110	23,06,984	1,37,32,615	1,17,01,203	1,85,81,833	1,04,00,226	42,30,117	23,11,173	18
6·95	6·87	5·98	5·28	5·68	5·29	5·66	7·25	§6·07	§5·86	19
162	172	4,583	3,064	18,489	17,342	5,208	3,680	4,552	8,182	20
1,664	2,991	35,936	33,727	4,30,70	4,72,156	1,13,889	1,49,549	89,775	87,993	21
30·03	17·89	15·64	15·71	17 66	15·95	22·09	23·37	15·74	14·40	22
444,412	461,797	21,303	26,323	25,092	16,363	82,719	65,690	7,573	7,808	23
5,07,245	5,48,282	62,926	1,28,547	91,534	61,576	2,05,101	1,48,893	47,427	50,477	24
3·24	3·09	3·81	3·14	4·98	3·80	3·40	3·54	3·04	3·17	25
503,135	472,225	422,836	474,787	1,755,240	1,333,957	213,536	253,119	324,943	323,312	26
6,21,579	5,45,749	3,02,864	3,79,668	11,60,827	9,91,631	4,04,027	4,61,418	2,62,821	2,59,747	27
2·44	2 47	2·64	2·95	2·43	2·61	2·39	2·39	2·46	2·47	28
1,559,278	1,315,396	1,249,070	1,251,694	3,994,393	2,831,988	1,997,732	1,262,573	708,924	618,346	29
45,55,664	31,71,042	35,99,721	28,75,467	1,56,37,427	1,35,07,850	1,97,36,700	1,13,16,091	47,04 151	28,10,179	30
5·06	4·54	5 41	4·73	5·32	5·12	5·46	6·66	§5·85	§5·85	31
14,189	13,006	17,448	16,065	55,916	49,903	35,885	35,485	9,597	9,619	32
2,70,854	2,67,311	6,24,024	4,90,526	2,86,432	2,69,575	1,66,278	1,48,370	38,747	42,188	33
2,85,043	2,80,317	7,11,472	5,06,591	3,42,348	3,19,478	2,02,163	1,84,455	48,314	51,807	34
1,711	10,151	...	...	1,700	3,513	...	...	...	...	35
78,44,070	63,74,157	72,71,955	61,46,322	2,35,98,421	2,19,01,446	2,54,15,068	1,70,10,149	64,40,310	45,22,924	36
35,91,486	36,85,999	36,69,241	32,11,457	1,36,22,321	1,29,73,835	1,08,77,236	1,04,09,268	27,81,301	27,86,252	37
42,49,584	26,88,158	36,02,714	29,34,865	99,76,100	89,30,611	1,45,37,832	66,00,881	36,59,009	17,36,672	38

** Excluding the Parlakimedi Light railway. § Excluding the Gwalior Light railway.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of each

Serial No.	GAUGE.	5′ 6″					
	CLASS: No.	8 BOMBAY, BARODA AND CENTRAL INDIA SYSTEM				9	
	Railway.	Bombay, Baroda and Central India. (*a*) to (*e*) and (*l*) and (*m*).		Rajputana-Malwa. (*f*) to (*k*).		Nizam's Guaranteed State.	
	Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
	COACHING.						
1	1st class . . . . . Number	38,521	30,715	16,908	12,443	5,946	5,044
2	Earnings . . . . Rs.	79,864	76,847	72,089	98,922	37,803	32,985
3	2nd class . . . . . Number	301,799	253,159	45,090	45,857	33,146	34,673
4	Earnings . . . . Rs.	2,33,558	2,20,107	1,13,924	1,37,289	64,846	68,441
5	3rd or Intermediate class . Number	199,331	178,759	147,875	140,068	137,756	133,994
6	Earnings . . . . Rs.	3,61,861	3,48,303	1,45,866	1,56,645	66,102	64,463
7	4th or Lowest class . . . Number	6,460,231	5,609,544	6,247,325	5,436,018	1,329,970	1,272,334
8	Earnings . . . . Rs.	18,86,387	16,39,121	29,91,852	27,07,070	6,55,044	5,58,635
9	Season tickets of all classes . Number	3,096,360	2,725,120	2,280	3,040	8,160	5,640
10	Earnings . . . . Rs.	1,89,886	1,47,929	594	895	9,512	6,812
11	Total passengers . . . Number	10,096,242	8,797,297	6,453,478	5,637,426	1,514,978	1,451,685
12	Earnings . . . . Rs	27,51,556	24,32,307	33,24,325	31,00,821	8,33,307	7,31,336
13	Parcels . . . . . Earnings . . . . Rs.	2,61,797	2,88,446	2,24,570	2,58,914	65,492	42,583
14	Luggage . . . . . Earnings . . . . Rs.	68,429	66,913	92,928	92,971	42,318	38,923
15	Other coaching traffic . . Earnings . . . . Rs.	47,097	72,465	95,955	2,05,559	28,358	41,927
16	Total Coaching traffic . . Earnings . . . . Rs.	31,28,879	28,60,131	37,37,778	36,58,265	9,69,475	8,54,769
	GOODS.						
17	General merchandise . . Tons	988,709	526,835	1,150,635	734,115	271,637	198,299
18	Earnings . . . . Rs.	59,58,263	38,32,263	1,09,19,636	68,24,451	18,83,078	13,32,570
19	Average rate per ton per mile, pies	8·73	8·69	6·79	6·74	9·33	9·20
20	Military stores . . . . Tons	248	428	2,611	3,480	957	449
21	Earnings . . . . Rs.	7,024	13,339	36,130	55,422	13,395	10,764
22	Average rate per ton per mile, pies	18·40	20·48	18·34	20·85	25·63	32·00
23	Coal for the public and for foreign railways. Tons	18,908	23,142	10,768	7,023	199,468	195,072
24	Earnings . . . . Rs.	65,784	84,653	42,464	23,318	6,85,620	6,21,964
25	Average rate per ton per mile, pies	2·89	2·88	4·81	4·77	3·94	4·04
26	Revenue stores, including coal and materials for construction. Tons	207,234	144,735	172,987	142,841	287,105	367,807
27	Earnings . . . . Rs.	2,02,632	1,75,781	3,38,406	2,86,929	1,07,211	1,27,008
28	Average rate per ton per mile, pies	2·43	2·74	2·77	2·73	3·96	3·93
29	Total goods . . . . . Tons *	1,215,099	695,140	1,337,001	887,459	759,401	761,622
30	Earnings † . . . Rs.	63,77,817	43,16,525	1,13,68,605	72,62,965	27,07,993	21,03,171
31	Average rate per ton per mile, pies	8·01	7·91	6·53	6·44	6·71	6·34
	SUNDRIES.						
32	Electric telegraph . . . Earnings . . . . Rs.	24,760	20,013	30,010	28,248	14,255	11,525
33	Sundries . . . . . Earnings . . . . Rs.	2,30,827	1,61,027	1,72,706	2,45,630	1,27,210	1,95,781
34	Total . . . . . Earnings . . . . Rs.	2,55,587	1,81,040	2,02,716	2,73,878	1,41,465	2,07,306
35	Steam-boat . . . . . Earnings . . . . Rs.	...	...	...	...	...	...
	TOTAL.						
36	Grand total, earnings . . . . . Rs.	97,62,283	73,57,696	1,53,09,099	1,11,95,108	38,18,953	31,65,246
37	Total working expenses ‡ . . . . . Rs.	41,87,346	41,95,609	64,22,795	61,56,441	16,07,611	15,85,834
38	Net earnings . . . . . Rs.	55,74,937	31,62,087	88,86,304	50,38,667	22,11,342	15,79,412

* Including revenue stores, but excluding live stock.
† Including all other items not detailed above.
‡ Including special contribution to Provident Fund.

DIX 44—*continued.*

railway (by systems) during each half-year of 1902—contd.

5′ 6″		3′ 3⅜″								
10		12		13		14		15		Serial No.
Madras.		Bengal Dooars.		Dibru-Sadiya.		Assam-Bengal.		Deoghur.‖		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
17,225	16,897	330	315	2,153	1,820	2,226	2,365	199		1
1,70,279	1,53,089	898	797	4,765	4,154	12,053	12,103	100		2
62,601	68,604	1,181	1,117	1,586	1,458	5,466	5,243	...		3
2,04,318	2,00,694	1,694	1,588	1,954	1,842	12,338	12,457	...		4
10,179	10,687	2,344	3,132	157,092	138,268	2,985	2,943	184,816		5
25,408	22,375	933	1,123	59,409	49,334	3,430	3,724	25,728		6
6,314,525	6,152,458	175,951	178,096	...	...	947,184	795,469	...		7
26,23,697	25,07,071	44,234	44,459	...	...	545,733	444,675	...		8
317,480	373,360	...	...	...	...	...	...	...		9
10,785	19,246	...	...	...	...	...	...	...		10
6,722,010	6,622,002	179,786	182,660	160,831	141,546	957,861	805,660	185,015		11
30,36,480	29,04,475	47,759	47,967	66,218	55,330	5,73,554	4,72,959	25,828		12
2,32,641	2,14,072	3,306	2,964	3,781	4,738	13,333	15,403	172		13
1,24,675	1,30,814	2,255	1,695	1,549	1,711	7,917	9,272	325		14
1,04,215	94,543	1,925	1,528	5,249	4,803	15,222	23,681	...		15
34,98,011	33,43,904	55,245	54,154	76,777	66,582	6,10,026	5,21,265	26,325		16
812,542	660,994	26,525	48,914	30,344	33,570	62,781	86,326	...		17
42,86,772	34,70,539	98,953	2,36,723	1,46,465	1,77,098	2,56,591	3,46,909	8,103		18
6·80	8·21	19·46	24·56	§33·89	§36·59	7·19	6·57	2,213		19
3,180	3,388	...	...	...	...	154	53	...		20
77,923	81,223	...	...	...	...	3,450	1,184	...		21
25·05	22·39	...	...	...	...	23·21	22·07	...		22
248,093	245,691	5,340	3,481	228,527	212,739	5,037	7,315	...		23
6,36,442	5,77,511	10,545	6,634	2,11,002	1,96,330	8,174	16,664	2,174		24
4·22	4·09	8·51	7·89	§5·54	§5·65	3·67	4·01	§87		25
179,460	204,409	4,336	2,491	2,644	2,099	32,635	131,268	...		26
1,96,255	2,38,869	3,223	1,651	646	955	54,006	93,428	...		27
2·56	2·55	3·20	3·24	§2·84	§2·90	2·54	2·99	...		28
1,243,275	1,114,482	36,201	54,886	261,515	248,408	100,607	224,962	10,277		29
52,40,487	44,34,827	1,13,991	2,46,854	3,58,439	3,74,652	3,27,591	4,68,254	2,907		30
6·08	6·71	15·38	22·30	§8·59	§9·69	5·52	5·38	...		31
10,167	10,657	709	1,023	4,727	4,313	7,786	7,474	...		32
2,91,386	2,18,723	22,406	17,263	13,076	13,573	56,073	80,597	526		33
3,01,553	2,29,380	23,115	18,286	17,803	15,886	63,859	87,981	526		34
...	...	8,788	6,541	..	..	8,918	8,163	...		35
90,40,051	80,08,111	2,01,139	3,25,835	4,53,019	4,57,120	10,10,394	10,85,663	29,758		36
44,64,467	49,02,874	1,32,157	1,37,095	2,53,107	2,45,408	8,94,342	9,47,299	23,733		37
45,75,584	31,05,237	68,982	1,88,740	1,99,912	2,11,712	1,16,052	1,38,364	6,925		38

§ Excluding Ledo and Tikak-Margherita colliery.
‖ Accounts prepared yearly.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of each

Serial No.			3' 3"					
	GAUGE.							
	CLASS: No.		16		17		18	
	Railway.		Bengal and North-Western.		Rohilkhand and Kumaon.		Jodhpur and Bikaner.	
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
	COACHING.							
1	1st class	Number	9,074	15,412	2,971	2,737	1,290	1,789
2		Earnings Rs.	26,129	31,170	20,121	19,817	9,122	12,760
3	2nd class	Number	15,895	17,314	10,777	11,440	9,218	7,631
4		Earnings Rs.	26,886	29,211	35,419	38,071	21,279	22,328
5	3rd or Intermediate class	Number	66,382	64,319	8,155	6,954	...	...
6		Earnings Rs.	45,667	46,817	6,819	5,938	...	...
7	4th or Lowest class	Number	5,016,547	4,919,276	971,441	832,873	679,275	678,822
8		Earnings Rs.	20,30,808	20,15,146	3,37,687	2,78,163	3,97,151	3,92,701
9	Season tickets of all classes	Number	858	794	...	...	...	...
10		Earnings Rs.	594	823	...	...	...	...
11	Total passengers	Number	5,108,763	5,017,115	993,344	854,604	689,783	688,242
12		Earnings Rs.	21,30,034	21,23,667	4,00,046	3,47,291	4,27,552	4,27,789
13	Parcels	Earnings Rs.	47,119	38,523	14,334	14,441	20,635	22,080
14	Luggage	Earnings Rs.	39,940	43,671	13,015	15,556	16,966	19,255
15	Other coaching traffic	Earnings Rs.	46,832	56,878	16,975	19,460	17,101	20,923
16	Total Coaching traffic	Earnings Rs.	§ 21,90,805	§ 21,99,810	4,44,370	3,96,448	4,82,254	5,00,047
	GOODS.							
17		Tons	669,969	410,927	230,034	162,106	179,722	107,773
18	General merchandise	Earnings Rs.	30,72,040	18,99,847	5,91,242	3,64,086	8,26,429	4,79,629
19		Average rate per ton per mile, pies	6·75	6·23	‖ 7·18	‖ 6·51	8·93	7·83
20		Tons	22	9	629	383	262	251
21	Military Stores	Earnings Rs.	2	15	5,103	3,106	4,251	4,131
22		Average rate per ton per mile, pies	2·18	7·10	‖ 21·75	‖ 17·54	17·95	17·92
23	Coal for the public and for foreign railways.	Tons	44,041	13,612	178	224	7,443	3,453
24		Earnings Rs.	76,633	25,038	236	248	11,553	4,470
25		Average rate per ton per mile, pies	4·28	4·08	‖ 4·71	‖ 3·11	4·38	5·20
26	Revenue stores, including coal and materials for construction.	Tons	149,473	171,581	24,534	37,857	79,594	77,535
27		Earnings Rs.	1,99,233	25,003	16,746	18,511	58,823	57,068
28		Average rate per ton per mile, pies	2·45	2·45	‖ 2·45	‖ 2·45	3·29	3·08
29		Tons *	853,505	596,129	255,375	200,570	267,021	189,092
30	Total goods	Earnings † Rs.	§ 30,41,699	§ 16,67,167	6,24,093	3,85,413	9,03,163	5,49,632
31		Average rate per ton per mile, pies	5·49	4·87	‖ 6·91	‖ 6·03	8·00	6·80
	SUNDRIES.							
32	Electric telegraph	Earnings Rs.	18,890	14,330	4,168	2,980	16,999	15,364
33	Sundries	Earnings Rs.	2,16,604	1,92,797	37,076	50,152	17,717	17,070
34	Total	Earnings Rs.	2,35,494	2,07,127	41,244	53,132	34,716	32,434
35	Steam boat	Earnings Rs.	3,88,741	2,78,148	...	...	...	...
	TOTAL.							
36	Grand total, earnings	Rs.	58,56,737	42,93,428	11,09,617	8,30,013	14,20,133	10,82,113
37	Total working expenses ‡	Rs.	24,42,713	22,61,431	4,65,782	4,63,441	6,22,637	6,83,013
38	Net earnings	Rs.	34,14,024	20,31,997	6,43,835	3,66,572	7,97,496	3,99,100

* Including revenue stores, but excluding live stock.
† Including all other items not detailed above.
‡ Including special contribution to Provident Fund.

DIX 44—*continued.*

ailway (by systems) during each half-year of 1902—contd.

3′ 3⅜″

19		20		21		22		23		Serial No.
Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Mahratta.		South Indian.		Burma.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
230	281	2,808	2,371	9,716	9,387	10,257	10,138	12,474	13,127	1
1,152	1,696	7,526	7,291	52,735	63,196	53,589	50,590	69,897	66,112	2
525	975	21,353	19,414	39,754	37,820	54,588	59,594	74,161	72,430	3
1,374	2,638	27,072	24,683	80,276	92,752	88,653	95,794	1,28,436	1,17,013	4
1,244	1,622	25,629	23,373	...	...	...	...	6,231,951	5,650,905	5
1,011	1,249	23,327	22,621	...	...	...	...	27,19,289	21,96,735	6
91,554	81,790	787,380	606,559	3,366,157	2,975,885	7,194,776	7,716,910	...	...	7
43,707	41,647	4,04,746	3,36,365	14,22,335	13,01,882	25,92,405	27,39,610	...	...	8
240	280	9,040	8,080	10,946	8,780	179,960	161,080	55,140	55,280	9
90	105	468	392	1,023	760	9,438	5,978	5,799	5,212	10
93,793	84,948	846,210	659,797	3,365,167	3,031,872	7,439,581	7,947,722	6,373,726	5,791,742	11
47,334	47,335	4,63,139	3,91,352	15,56,369	14,58,590	27,44,085	28,91,972	29,23,442	23,85,072	12
1,527	1,477	14,156	10,379	1,20,589	1,04,153	81,889	86,066	51,774	70,536	13
1,061	697	8,083	7,310	55,773	56,015	31,907	29,720	35,225	29,358	14
955	2,974	12,493	24,405	69,471	1,00,535	50,563	53,212	55,980	49,224	15
50,877	52,483	4,97,871	4,33,446	18,02,152	17,19,293	29,08,444	30,60,970	30,66,471	25,34,590	16
15,995	9,387	140,045	92,216	484,911	375,480	594,538	499,483	682,796	483,173	17
68,868	39,902	4,51,604	2,45,223	28,84,669	22,40,314	24,44,504	22,06,547	36,00,913	24,82,201	18
14'55	13'98	11'77	12'14	7'67	7'73	8'10	8'08	8'36	7'60	19
2	29	1	3	1,915	930	289	217	1,034	687	20
23	364	11	34	22,226	19,686	5,007	4,872	13,894	12,592	21
31'66	35'15	24'85	22'99	7'21	15'33	28'41	24'77	15'89	16'54	22
360	421	154	3	1,573	2,448	6,221	8,710	4	1	23
347	418	378	11	8,961	12,024	8,503	10,927	52	4	24
2'72	2'72	4'57	9'78	3'62	3'57	6'77	5'04	7'26	6'98	25
640	13	7,764	4,647	63,632	83,611	278,461	518,175	218,436	210,970	26
1,210	13	5,102	4,098	1,55,834	2,39,827	70,416	97,837	1,74,332	2,08,060	27
5'42	2'72	2'06	1'77	2'55	2'66	2'48	2'48	2'09	2'33	28
16,907	9,850	147,964	96,869	552,031	462,469	879,509	1,026,585	902,270	694,831	29
71,151	41,121	4,58,379	2,50,248	30,93,249	25,32,931	25,44,809	23,39,104	38,85,051	27,97,711	30
13'86	13'46	11'20	11'11	6'94	6'53	7'67	7'38	7'50	6'66	31
351	375	6,704	6,914	15,025	14,325	13,209	12,245	12,985	11,552	32
573	456	16,999	14,428	86,723	53,538	11,059	1,20,535	86,472	76,032	33
924	831	23,703	21,342	1,01,748	67,863	24,268	1,32,780	99,457	87,584	34
...	...	...	...	...	...	...	...	16,665	15,592	35
1,22,952	94,435	9,79,953	7,05,036	49,97,149	43,20,087	54,77,521	55,32,854	70,67,594	54,35,077	36
60,511	59,745	5,30,799	4,71,536	30,49,949	30,14,970	26,04,611	24,92,872	36,92,517	35,37,472	37
62,441	34,690	4,49,154	2,33,500	19,47,200	13,05,117	28,72,910	30,39,982	33,75,077	18,97,605	38

§ Excluding the earnings of the Cawnpore-Burhwal, metre gauge link which have under the terms of the running powers agreement with the Oudh and Rohilkhand railway been credited under Sundries, and in the earnings shown against the Oudh and Rohilkhand railway.

‖ Excluding the Powayan Light railway.

Appendix 44.
Earnings under different heads.

APPEN

Gross earnings under different heads of each

Serial No.			GAUGE.	2′ 6″					
			CLASS: No.	24		25		26	
			Railway.	Morvi.		Barsi.		Farakeshwar-Magra.	
			Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
			COACHING.						
1	1st class		Number	732	748	325	345	175	203
2			Earnings Rs.	2,928	2,888	828	846	66	79
3	2nd class		Number	4,858	4,156	...	...	457	418
4			Earnings Rs.	8,994	7,570	...	...	183	178
5	3rd or intermediate class		Number	132,794	99,988	...	...	5,872	5,208
6			Earnings Rs.	99,761	75,720	...	...	999	973
7	4th or Lowest class		Number	...	...	41,626	29,480	212,960	1,90,687
8			Earnings Rs.	...	...	13,272	9,077	34,923	30,711
9	Season tickets of all classes		Number	...	...	...	...	6,440	6,111
10			Earnings Rs.	...	...	...	...	1,089	894
11	Total passengers		Number	138,384	104,892	41,951	29,825	225,904	202,627
12			Earnings Rs.	1,11,683	86,178	14,100	9,924	37,260	32,835
13	Parcels		Earnings Rs.	4,651	3,020	756	470	232	441
14	Luggage		Earnings Rs.	3,039	2,415	422	305	565	644
15	Other coaching traffic		Earnings Rs.	5,791	6,056	68	32	26	12
16	Total coaching traffic		Earnings Rs.	1,25,164	97,669	15,346	10,731	38,083	33,932
			GOODS.						
17	General merchandise		Tons	12,604	6,110	39,435	10,312	9,673	
18			Earnings Rs.	45,604	23,810	95,479	24,899	8,034	
19			Average rate per ton per mile, pies	10·69	12·41	21·14	21·08	...	
20	Military stores		Tons	14	11	6	3	...	
21			Earnings Rs.	156	104	20	22	...	
22			Average rate per ton per mile, pies	27·80	24·98	29·81	64·35	...	
23	Coal for the public and for foreign railways.		Tons	16	27	65	1	52	
24			Earnings Rs.	51	121	77	2	50	
25			Average rate per ton per mile, pies	14·41	13·04	10·35	19·09	...	
26	Revenue stores, including coal and materials for construction.		Tons	127	139	...	...	1,305	
27			Earnings Rs.	156	197	...	...	3,144	
28			Average rate per ton per mile, pies	7·28	7·84	...	...	...	
29			Tons*	12,761	6,287	39,506	10,316	4,220	6,810
30	Total goods		Earnings † Rs.	46,159	24,542	95,798	25,082	5,053	6,202
31			Average rate per ton per mile, pies	10·70	12·38	21·17	21·22	...	...
			SUNDRIES.						
32	Electric Telegraph		Earnings Rs.	2,035	2,177	174	79	174	203
33	Sundries		Earnings Rs.	4,548	2,764	1,459	1,606	331	294
34	Total		Earnings Rs.	6,583	4,941	1,633	1,685	505	497
35	Steam-boat		Earnings Rs.	...	...	...	...	...	...
			TOTAL.						
36	Grand total, earnings		Rs.	1,77,906	1,27,152	1,12,777	37,498	43,641	40,631
37	Total working expenses ‡		Rs.	1,01,279	90,480	60,342	37,054	29,712	29,718
38	Net earnings		Rs.	76,627	36,672	52,435	444	13,929	10,913

* Including revenue stores, but excluding live stock. † Including all other items not detailed above. ‡ Including special contribution to Provident Fund.

DIX 44—*concluded.*

railway (by systems) during each half-year of 1902—concld.

2′ 6″				2′ 0″								Serial No.
27		28		29		30		31		32		
Ranaghat-Krishnagar.		Tezpur-Balipara.		Darjeeling-Himalayan		Howrah-Amta.		Howrah-Sheakhala.		Jorhat.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	...	...	3,059	2,126	...	...	...	...	...	...	1
...	...	...	...	36,698	28,570	...	...	...	...	...	...	2
...	...	...	...	7,098	6,648	...	...	...	...	...	...	3
...	...	...	...	41,449	39,804	...	...	...	...	...	...	4
...	...	...	...	29,063	32,107	...	...	...	...	...	...	5
...	...	...	...	63,939	62,709	...	...	...	...	...	...	6
120,966	119,701	61,585	63,776	...	...	398,133	384,451	157,092	156,624	65,120	65,209	7
35,687	34,160	14,438	15,029	...	...	1,23,526	1,17,253	37,047	36,681	11,419	10,639	8
...	...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	10
120,966	119,701	61,585	63,776	39,220	40,881	398,133	384,451	157,092	156,624	65,120	65,209	11
35,687	34,160	14,438	15,029	1,42,086	1,31,082	1,23,526	1,17,253	37,047	36,681	11,419	10,639	12
1,324	1,257	155	195	19,298	16,758	140	140	60	59	...	...	13
				24,226	27,109	380	447	171	228	...	...	14
		2,221	2,101	7,300	7,596	309	320	123	144	...	...	15
37,011	35,417	16,814	17,325	1,92,910	1,82,545	1,24,355	1,18,160	37,401	37,112	11,419	10,639	16
812	614	446	5,790	12,971	13,734	6,770	7,123	2,191	3,872	4,664	7,090	17
1,473	1,309	12,461	27,728	1,92,177	2,18,093	10,556	11,705	2,837	4,503	24,194	38,376	18
...	...	...	...	64·32	69·12	...	...	...	...	...	...	19
...	...	...	...	43	64	...	...	...	...	...	...	20
...	...	...	...	1,872	1,900	...	...	...	...	...	...	21
...	...	...	...	183·28	117·48	...	...	...	...	...	...	22
...	...	314	1,317	1,026	580	...	...	...	...	...	...	23
...	...	813	3,405	9,495	5,785	...	...	...	...	...	...	24
...	...	...	...	38·76	42·84	...	...	...	...	...	...	25
...	...	...	...	2,537	1,967	...	...	...	...	...	...	26
...	...	...	...	12,629	10,413	...	...	...	...	...	...	27
...	...	...	...	85·92	89·64	...	...	...	...	...	...	28
812	614	760	7,107	16,577	16,345	6,770	7,123	2,191	3,872	4,664	7,090	29
1,473	1,309	13,274	31,133	2,21,031	2,40,479	10,556	11,705	2,837	4,503	24,194	38,376	30
...	...	...	...	68·16	48·60	...	...	...	...	...	...	31
...	...	727	794	1,656	1,853	...	...	...	...	505	471	32
458	512	3,013	1,932	4,464	8,341	368	353	86	80	589	448	33
458	512	3,740	2,726	6,120	7,194	368	353	86	80	1,094	919	34
...	...	...	...	...	...	...	...	...	...	...	...	35
38,942	37,238	33,828	51,184	4,20,061	4,30,218	1,35,279	1,30,218	40,324	41,695	36,707	49,934	36
28,248	26,579	29,859	33,562	2,36,582	2,35,694	66,612	65,765	24,989	25,341	31,205	39,091	37
10,694	10,659	3,969	17,682	1,83,479	1,94,524	68,667	64,453	15,385	16,354	—14,498	10,843	38

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each railway

	No.	GAUGE.	5′ 6″					
		CLASSIFICATION NUMBER.	1		2		3	
		Railway.	East Indian.		Eastern Bengal State.		Bengal Central.	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	4,43,773	4,52,602	1,45,535	1,43,335	12,971	12,877
	2	Maintenance of permanent-way { Wages . „	5,01,474	5,32,628	2,17,154	2,16,812	21,385	20,406
		{ Materials . „	14,23,116	10,02,357	4,16,686	2,40,183	41,600	16,027
	3	Repairs of bridges, etc. . . . . „	1,98,238	3,35,335	1,07,185	1,14,618	4,166	1,786
	4	Conservancy of rivers . . . . . „	...	...	5,077	331	96	451
	5	Repairs of stations and buildings . . . „	7,65,652	8,70,571	1,56,262	1,71,758	10,292	8,217
	6	TOTAL* . „	36,44,777	34,72,789	11,24,722	10,15,133	92,834	60,579
Locomotive.	7	General Superintendence . . . . „	2,97,341	3,13,770	76,770	80,437	7,177	7,268
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . . „	11,29,209	10,95,112	2,00,847	2,14,474	12,824	14,570
	9	Fuel . . . . . „	4,90,982	4,54,839	2,88,182	3,57,079	22,033	31,059
	10	Water . . . . . „	56,043	51,731	19,960	20,530	1,848	1,915
	11	Oil, tallow and other stores . . . . „	1,83,875	1,99,339	34,625	35,817	1,616	3,933
	12	Maintenance and renewal of { Loco. engines . . „	11,94,992	11,25,042	4,93,299	1,86,591	19,806	12,217
		{ Machinery . . . „	44,656	81,180	53,481	52,094	695	1,885
	13	TOTAL* . „	39,57,002	38,46,564	12,88,133	10,36,495	68,683	76,171
Carriage and Wagon.	14	General Superintendence . . . . „	72,191	80,604	41,179	40,804	3,564	3,603
	15	Repairs and renewal of { Coaching vehicles . „	1,70,057	1,29,478	1,12,647	1,52,252	7,828	7,987
		{ Goods „ . „	7,16,350	2,93,931	1,56,943	90,188	5,165	10,283
		{ Machinery . . „	31,336	26,698	7,076	8,503	300	1,549
	16	Cleaning and oiling . . . . . „	1,25,470	1,19,846	46,369	45,305	3,287	3,973
	17	TOTAL* . „	11,26,773	6,52,971	3,70,740	3,50,069	20,379	27,493
Traffic.	18	General Superintendence . . . . „	3,17,750	3,11,625	1,47,224	1,53,122	12,076	12,290
	19	Station staff . . . . . „	12,74,192	12,01,138	5,18,348	5,57,377	33,180	46,336
	20	Train staff . . . . . „	5,55,522	5,50,295	1,03,353	1,10,410	6,448	6,315
	21	Fuel, lighting and general stores . . . „	2,47,613	2,52,431	96,377	1,04,325	7,099	7,370
	22	Clothing . . . . . „	24,368	19,528	7,943	10,696	514	442
	23	Printing, stationery and tickets . . . „	1,06,150	1,12,566	42,265	45,293	7,582	5,524
	24	Charges for delivery and collection of goods . „	6,027	4,812	1,023	1,232	...	...
	25	TOTAL* . „	25,77,811	25,14,265	9,40,550	10,02,749	69,712	81,912
General.	26	Home expenditure or General administration „	1,77,557	1,86,146	36,467	...	19,431	19,392
	27	Agent's Office . . . . . „	61,890	69,479	41,669	43,317	13,895	14,071
	28	Audit, accounts and pay office . . . „	2,41,602	2,37,149	1,05,876	1,08,324	17,646	18,103
	29	Stores Department . . . . . „	73,082	76,597	14,050	16,932	2,219	1,906
	30	Medical Department . . . . . „	68,983	76,776	26,231	25,799	2,029	2,132
	31	Rents and Miscellaneous . . . . „	1,01,872	93,746	34,161	28,322	9,843	8,658
	32	Police . . . . . „	1,09,482	1,05,246	22,064	23,584	4,925	4,879
	33	Advertising . . . . . „	4,533	8,963	1,430	3,047	506	804
	34	Electric telegraph . . . . . „	3,26,418	3,96,968	1,32,160	1,20,663	10,337	12,205
	35	TOTAL* . „	11,67,831	12,52,538	4,18,162	3,73,058	80,832	82,154
Miscellaneous.	36	Law charges . . . . . „	7,187	11,659	1,357	4,228	943	821
	37	Compensation. . . . . „	61,327	97,198	30,160	27,852	910	201
	38	Rates and taxes . . . . . „	50,813	50,174	17,539	17,463	2,218	1,972
	39	Payments to other lines . . . . . „	2,61,620	3,57,334	53,239	1,14,359	19,164	42,159
	40	TOTAL* . „	4,64,215	6,03,541	2,33,363	2,51,523	26,176	56,371
	41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT† . . . . . „	1,31,56,911	1,25,43,392	43,75,670	40,29,327	3,58,616	3,84,680
	42	Steam-boat service . . . . . „	85,417	94,467	2,78,275	3,12,329	...	...
		GRAND TOTAL WORKING EXPENSES† „	1,32,42,328	1,26,37,859	46,33,945	43,41,656	3,58,616	3,84,680

* Includes all other items of expenditure not enumerated.
† Includes special contribution to Provident Fund.

DIX 45.

(by systems) during each half-year of 1902.

Appendix 45.
Expenses under different heads.

5′ 6″								
4		5		6		7		No.
Bengal-Nagpur ‡		Oudh and Rohilkhand State.		North-Western State.		Great Indian Peninsula (*a*) to (*h*).		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1,77,329	1,69,932	1,56,080	1,67,899	4,74,260	4,87,863	3,49,614	3,40,426	1
2,59,745	2,84,559	1,56,836	1,62,520	8,18,833	8,21,998	5,00,751	5,09,991	2
89,424	1,50,269	1,63,725	2,87,438	14,93,162	4,41,427	6,29,017	5,42,855	
1,30,737	1,41,781	1,29,497	1,28,377	2,93,848	3,04,778	2,53,156	3,13,266	3
...	...	3,562	7,515	32,214	78,579	...	...	4
74,564	86,410	1,46,460	70,211	4,59,086	3,04,032	2,58,976	3,27,340	5
7,67,384	9,14,439	8,41,396	9,09,961	40,15,048	28,96,371	§ 21,53,199	§ 22,71,793	6
1,70,685	1,12,331	71,952	68,380	2,36,871	2,28,142	2,60,142	2,67,922	7
2,85,070	2,74,726	1,30,946	1,37,621	6,86,839	6,81,639	13,01,877	11,57,671	8
1,97,033	1,80,016	4,63,173	4,16,098	21,25,429	20,59,144	19,76,075	16,15,274	9
28,182	25,929	15,083	14,468	87,471	89,729	1,55,848	1,39,337	10
40,236	33,264	33,821	32,935	1,10,706	97,348	1,91,782	1,66,458	11
2,12,702	2,46,067	1,38,743	1,23,840	6,76,773	11,95,240	15,94,323	15,63,865	12
24,162	9,189	13,947	16,606	95,798	94,140	80,123	80,953	
11,08,542	11,09,329	10,24,591	9,71,314	46,22,886	48,79,778	§‖ 62,09,524	§‖ 55,33,436	13
22,204	22,978	16,737	15,231	93,343	99,151	81,326	79,158	14
63,401	68,534	1,03,547	1,49,385	5,51,073	3,32,689	4,50,540	5,60,712	15
88,084	64,755	5,30,602	1,12,206	11,01,432	14,97,154	5,94,229	6,36,499	
1,864	2,890	6,176	4,003	21,020	9,257	35,413	36,192	
86,875	78,221	41,667	42,386	2,31,613	1,34,637	1,34,054	1,85,247	16
2,72,851	2,41,084	7,01,106	3,25,310	19,18,361	20,96,609	13,63,088	15,02,134	17
1,04,009	1,19,563	87,413	81,311	2,31,497	2,34,933	2,08,112	2,16,663	18
2,57,320	2,38,347	3,06,289	2,87,373	9,30,050	9,42,606	9,01,067	8,63,962	19
82,802	78,833	97,340	91,404	3,30,337	3,28,450	4,87,125	3,10,181	20
67,201	63,887	83,860	60,409	2,14,806	2,08,831	2,53,038	2,78,442	21
941	2,406	14,632	6,211	18,936	43,027	46,642	35,145	22
44,592	46,398	34,012	38,664	79,508	96,979	1,21,903	1,84,430	23
992	1,173	1,761	1,502	606	290	5,056	4,115	24
6,53,617	6,44,883	6,45,597	5,83,304	18,34,553	18,81,329	§ 21,02,246	§ 21,42,707	25
1,27,325	1,34,638	20,505	...	40,079	...	1,71,259	1,80,884	26
39,878	39,810	26,733	28,584	67,260	66,263	78,784	66,929	27
96,920	1,03,429	81,797	89,909	1,96,068	2,07,701	2,44,090	2,48,010	28
22,531	21,591	18,833	20,565	54,503	50,346	70,536	76,251	29
25,880	30,049	13,269	13,660	52,768	51,940	44,875	47,083	30
44,390	39,947	1,990	1,800	78,114	54,537	81,057	63,250	31
23,467	33,846	20,248	22,115	64,396	60,270	88,651	99,836	32
4,307	4,445	869	2,289	2,665	2,771	2,951	3,630	33
1,26,767	1,29,668	78,382	82,638	2,86,841	2,94,133	2,75,393	2,75,269	34
5,11,629	5,37,508	2,03,916	2,87,264	8,43,873	7,89,668	§ 10,66,217	§ 10,63,402	35
997	686	17	85	144	345	3,654	1,342	36
5,813	2,616	10,240	15,437	22,394	1,08,872	53,040	28,707	37
7,512	4,387	666	4,222	28,260	26,893	32,154	31,696	38
1,26,737	1,05,046	1,00,313	56,233	58,519	34,436	4,33,409	2,90,668	39
2,47,777	1,99,278	1,62,635	1,34,374	3,72,637	4,17,983	§ 7,74,263	§ 6,77,119	40
35,61,800	36,46,523	36,69,241	32,11,457	1,36,07,361	1,29,61,738	1,36,58,537	1,31,05,520	41
32,686	39,476	...	...	14,960	12,097	...	...	42
35,94,486	36,85,999	36,69,241	32,11,457	1,36,22,321	1,29,73,835	§ 1,36,58,537	§ 1,31,05,520	

‡ Excluding Parlakimedi Light railway.
§ Including the Gwalior Light railway, details for which are not given.
‖ Including the carriage and wagon expenses of the Gwalior Light railway as the figures cannot be separated.

Appendix 45.
Expenses under different heads.

APPEN

Working expenses under different heads of each railway

	No.	GAUGE.	5′ 6″					
		CLASSIFICATION NUMBER.	8				9	
			BOMBAY, BARODA AND CENTRAL INDIA SYSTEM.					
		Railway.	Bombay, Baroda and Central India. (*a*) to (*e*) and (*l*) and (*m*.)		Rajputana-Malwa. (*f*) to (*k*).		Nizam's Guaranteed State.	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	1,26,428	1,27,860	1,96,290	1,92,549	96,574	99,502
	2	Maintenance of permanent-way { Wages . „	1,95,817	2,03,054	2,94,513	2,95,905	1,34,366	1,30,730
		{ Materials . „	3,84,626	3,32,478	5,98,926	5,01,993	84,358	76,954
	3	Repairs of bridges, etc. . . . . „	79,525	73,048	1,21,034	1,05,343	43,899	65,411
	4	Conservancy of rivers . . . . . „	...	...	...	...	66	38
	5	Repairs of stations and buildings . . . „	1,21,242	97,658	1,89,539	1,46,688	29,647	44,464
	6	TOTAL* . „	9,63,105	8,88,173	14,87,955	13,23,942	4,07,176	4,84,738
Locomotive.	7	General Superintendence . . . . „	1,00,189	95,466	1,58,699	1,46,589	55,009	55,599
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . „	2,71,866	2,54,568	4,28,632	3,88,290	99,816	93,715
	9	Fuel . . . . . „	6,47,165	5,72,777	10,14,296	8,66,722	1,25,982	1,15,773
	10	Water . . . . . „	54,411	38,983	82,407	56,253	17,605	17,713
	11	Oil, tallow and other stores . . . . „	47,611	37,827	73,968	56,621	16,995	13,234
	12	Maintenance and renewal of { Locomotive engines . „	3,20,391	2,86,585	4,97,759	4,38,940	2,03,287	98,446
		{ Machinery . . . „	31,057	33,284	49,527	51,353	6,402	7,563
	13	TOTAL* . „	15,69,744	13,92,563	24,59,858	21,16,512	5,68,564	4,56,315
Carriage and Wagon.	14	General Superintendence . . . . „	33,878	34,959	53,668	53,703	7,859	7,463
	15	Repairs and renewal of { Coaching vehicles . „	1,47,737	2,45,539	2,33,279	3,74,294	32,353	30,634
		{ Goods . . . . „	2,11,850	3,26,759	3,28,283	4,88,250	45,828	21,631
		{ Machinery . . . „	12,529	18,013	19,980	27,792	710	263
	16	Cleaning and oiling . . . . . „	55,410	54,521	84,148	80,215	16,730	17,226
	17	TOTAL* . „	5,84,219	8,05,316	7,23,847	10,31,659	1,03,699	77,247
Traffic.	18	General Superintendence . . . . „	77,893	76,541	1,22,787	1,17,155	30,095	31,101
	19	Station staff . . . . . „	2,91,450	2,89,253	4,53,337	4,37,808	96,139	99,207
	20	Train staff . . . . . „	77,278	74,854	1,21,847	1,14,122	38,727	32,593
	21	Fuel, lighting and General stores . . „	77,749	82,890	1,22,962	1,27,068	31,164	35,482
	22	Clothing . . . . . „	10,592	7,100	16,891	10,716	195	1,230
	23	Printing, stationery and tickets . . . „	41,195	38,362	64,393	58,026	14,699	13,895
	24	Charges for delivery and collection of goods. „	...	...	...	...	...	...
	25	TOTAL* . „	5,85,411	5,78,998	9,12,060	8,85,231	2,31,926	2,45,117
General.	26	Home expenditure or General administration „	26,127	27,690	41,665	42,722	38,012	45,900
	27	Agent's Office . . . . . „	22,935	23,453	35,146	35,247	16,881	16,967
	28	Audit, accounts and pay office . . . „	86,331	88,035	1,34,648	1,33,346	64,397	66,507
	29	Stores Department . . . . . „	32,215	34,070	51,016	52,326	9,197	14,294
	30	Medical Department . . . . . „	18,928	20,065	29,706	30,496	11,779	13,320
	31	Rents and Miscellaneous . . . . „	34,693	29,553	54,288	44,604	18,014	21,904
	32	Police . . . . . „	44,228	44,262	67,644	65,451	31,062	32,326
	33	Advertising . . . . . „	789	774	1,257	1,195	513	1,398
	34	Electric telegraph . . . . . „	1,02,385	1,04,033	1,59,447	1,57,645	34,698	35,336
	35	TOTAL* . „	3,68,542	3,72,445	5,74,673	5,63,523	2,24,591	2,52,314
Miscellaneous.	36	Law charges . . . . . „	443	388	706	1,370	7,494	503
	37	Compensation . . . . . „	19,186	17,287	30,571	26,671	1,239	495
	38	Rates and taxes . . . . . „	10,410	10,206	16,600	15,746	343	281
	39	Payments to other lines . . . . „	24,278	14,887	38,716	22,968	28,661	12,850
	40	TOTAL* . „	85,792	81,687	1,53,472	1,25,883	71,055	70,103
	41	Total working expenses excluding steam-boat† „	41,87,346	41,95,609	64,22,795	61,56,441	16,07,611	15,85,834
	42	Steam-boat service . . . . . „	...	...	...	...	...	...
		GRAND TOTAL WORKING EXPENSES† „	41,87,346	41,95,609	64,22,795	61,56,441	16,07,611	15,85,834

* Includes all other items of expenditure not enumerated.
† Includes special contribution to Provident Fund.

DIX 45—*continued.*

(by systems) during each half-year of 1902—contd.

5′ 6″.		3′ 3⅜″.								No.
10		12		13		14		15		
Madras.		Bengal Dooars.		Dibru-Sadiya.		Assam-Bengal.		Deoghur. §		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1,93,137	1,89,640	3,427	4,511	8,150	8,162	75,555	74,378	...	...	1
2,35,641	2,62,014	13,243	12,268	18,693	19,203	1,19,290	1,13,500	...	...	2
1,70,603	2,40,466	1,407	2,492	22,286	26,633	10,894	4,122	...	...	
80,167	2,50,228	1,343	2,466	7,228	2,593	37,112	27,966	...	...	3
...	...	...	...	...	...	...	...	...	...	4
99,019	89,008	1,479	1,249	6,576	6,703	29,526	20,001	...	...	5
8,14,157	11,50,161	21,521	23,666	82,498	84,352	2,85,138	2,52,353	3,502		6
90,524	86,732	2,414	2,499	5,278	5,368	28,215	27,470	...	...	7
2,86,603	3,00,200	4,668	4,516	8,313	7,703	30,929	37,838	...	...	8
7,15,232	7,00,191	17,382	13,436	21,121	18,201	53,893	76,821	...	...	9
38,086	39,156	999	1,350	2,579	1,770	7,258	6,828	...	...	10
50,977	52,059	1,394	1,256	2,301	2,159	6,164	4,876	...	...	11
4,57,701	4,86,755	5,833	5,287	28,612	23,464	36,993	43,741	...	...	
12,585	13,926	1,169	1,159	2,668	2,697	874	1,563	...	...	12
18,90,927	19,32,975	33,801	29,528	70,876	61,362	1,72,585	2,14,760	9,977		13
22,632	21,683	1,205	1,250	3,083	3,175	9,405	9,156	...	...	14
1,37,779	1,55,567	1,915	3,016	4,448	3,990	17,748	18,400	...	...	
1,89,191	1,56,514	1,409	1,964	14,464	12,620	17,055	16,657	...	...	15
7,842	9,419	33	61	1,223	1,162	344	340	...	...	
52,397	50,363	2,422	2,398	2,393	2,613	5,254	6,792	...	...	16
4,38,876	4,29,004	6,990	8,696	25,611	23,560	50,107	51,773	993		17
99,230	1,04,241	4,203	4,509	6,457	6,325	29,075	29,497	...	...	18
3,06,165	3,19,669	10,954	11,928	13,647	13,569	72,587	78,206	...	...	19
94,362	96,898	1,635	1,874	3,492	3,350	15,923	16,944	...	...	20
52,205	60,939	1,261	1,178	1,029	962	19,787	18,773	...	...	21
8,413	10,196	116	108	1	...	668	1,455	...	...	22
65,234	63,431	2,286	1,496	2,149	2,248	7,344	7,336	...	...	23
2,250	2,098	...	...	4,565	6,828	...	...	...	...	24
651,855	6,80,304	20,704	21,344	31,378	33,319	1,45,856	1,52,563	6,118		25
49,653	54,840	12,025	12,538	12,921	12,921	49,887	54,254	...	...	26
36,274	42,001	13,914	13,415	6,220	6,152	22,483	23,027	...	...	27
1,00,458	1,00,458	5,174	6,096	6,979	7,134	49,143	48,384	...	...	28
15,610	15,498	848	868	2,893	2,918	20,853	16,297	...	...	29
17,832	18,981	932	948	2,048	2,051	14,178	12,353	...	...	30
22,111	21,218	1,051	1,910	2,698	2,687	6,697	6,758	...	...	31
35,887	37,259	784	389	...	...	8,725	8,849	...	...	32
2,952	3,122	7	8	14	10	228	135	...	...	33
1,16,998	1,20,012	5,862	6,643	6,630	6,682	38,174	40,618	...	...	34
4,26,803	5,19,960	140,607	42,823	40,403	40,556	2,10,410	2,10,924	2,779		35
1,644	1,421	138	60	622	726	1,562	565	...	...	36
3,714	2,085	846	456	202	25	657	90	...	...	37
8,659	23,237	168	249	22	75	2,259	1,990	...	...	38
...	5	370	3,046	...	...	...	...	...	...	39
2,41,262	1,99,420	2,535	6,029	2,341	2,259	24,054	57,259	364		40
44,63,880	49,02,874	1,26,158	1,32,086	2,53,107	2,45,408	8,88,150	9,39,432	23,733		41
587	...	5,999	5,009	...	...	6,192	7,867	...		42
44,64,467	49,02,874	1,32,157	1,37,095	2,53,107	2,45,408	8,94,342	9,47,299	23,733		

§ Details not furnished.

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each railway

	No.	GAUGE.	3′ 3⅜″					
		CLASSIFICATION NUMBER.	16		17		18	
		Railway.	Bengal and North Western.		Rohilkund and Kumaon.		Johdhpur-Bikaner.	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	1,09,744	1,10,715	17,253	18,524	15,063	16,055
	2	Maintenance of permanent-way { Wages . ,,	1,16,895	1,15,346	25,099	23,596	77,056	84,629
		{ Materials ,,	1,67,125	1,64,739	28,183	32,562	4,361	84,186
	3	Repairs of bridges, etc. . . . . ,,	89,561	82,988	23,415	20,818	16,965	10,011
	4	Conservancy of rivers . . . . . ,,	15,103	7,239	4,235	1,226	...	...
	5	Repairs of stations and buildings . . . ,,	53,405	56,049	10,303	9,828	12,846	14,034
	6	TOTAL* . ,,	§6,48,362	§5,93,390	1,15,455	1,19,485	1,25,236	2,19,337
Locomotive.	7	General Superintendence . . . . ,,	48,102	51,197	13,265	15,105	15,060	14,720
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . . ,,	1,05,723	1,02,035	15,721	15,571	23,739	23,611
	9	Fuel . . . . . ,,	2,20,680	2,08,174	46,233	37,379	1,28,095	1,04,482
	10	Water . . . . . ,,	20,136	20,689	2,592	2,381	10,900	9,776
	11	Oil, tallow and other stores . . . . ,,	28,278	23,895	4,586	3,895	16,874	13,528
	12	Maintenance and renewal of { Locomotive engines . ,,	1,16,128	1,08,961	21,743	23,544	47,433	45,746
		{ Machinery . . . ,,	2,253	3,249	3,791	2,922	4,595	5,624
	13	TOTAL* . ,,	§5,77,434	§5,42,110	1,18,250	1,09,683	2,77,939	2,46,184
Carriage and Wagon.	14	General Superintendence . . . . ,,	17,300	18,079	4,280	5,079	3,410	3,619
	15	Repairs and renewal of { Coaching vehicles . ,,	47,435	36,316	12,715	7,700	18,957	15,496
		{ Goods . . . ,,	48,602	40,256	16,180	12,160	10,115	15,406
		{ Machinery . . ,,	1,891	1,720	439	572	486	664
	16	Cleaning and oiling . . . . . ,,	33,010	35,165	4,876	4,625	8,747	12,923
	17	TOTAL* . ,,	§1,33,857	§1,22,467	42,856	30,524	41,937	48,283
Traffic.	18	General Superintendence . . . . ,,	78,366	80,909	14,744	17,585	18,713	16,552
	19	Station staff . . . . . ,,	1,91,254	1,95,451	30,541	29,689	33,405	29,700
	20	Train staff . . . . . ,,	57,543	58,418	7,284	7,941	6,319	6,289
	21	Fuel, lighting and general stores . . . ,,	55,338	48,425	12,196	9,660	14,377	11,996
	22	Clothing . . . . . ,,	6,443	8,508	65	1,584	711	538
	23	Printing, stationery and tickets . . . ,,	21,829	22,704	5,597	8,125	11,044	9,335
	24	Charges for delivery and collection of goods . ,,	15,346	9,935	...	...	...	...
	25	TOTAL* . ,,	§4,29,216	§4,40,095	75,134	82,002	86,355	78,067
General.	26	Home expenditure and General administration ,,	56,883	56,588	15,807	10,187	...	...
	27	Agent's Office . . . . . ,,	22,020	15,325	7,785	8,309	4,346	3,613
	28	Audit, accounts and pay office . . . ,,	93,919	82,684	17,885	19,675	15,812	19,158
	29	Stores Department . . . . . ,,	9,987	10,396	4,925	5,188	3,292	3,325
	30	Medical Department . . . . . ,,	10,702	10,788	1,860	1,942	2,233	3,144
	31	Rents and Miscellaneous . . . . ,,	15,306	16,379	5,411	6,299	11	28
	32	Police . . . . . ,,	26,192	28,667	6,780	7,312	2,480	2,746
	33	Advertising . . . . . ,,	830	755	275	444	13	203
	34	Electric telegraph . . . . . ,,	72,584	76,623	14,192	14,634	22,419	25,102
	35	TOTAL* . ,,	§2,87,343	§2,84,363	74,932	83,960	53,803	60,535
Miscellaneous.	36	Law charges . . . . . ,,	2,762	2,502	1,770	1,156	30	...
	37	Compensation . . . . . ,,	11,372	4,384	1,580	897	907	5,586
	38	Rates and taxes . . . . . ,,	2,127	1,623	7	103	...	...
	39	Payments to other lines . . . . . ,,	90,401	14,207	215	1,404	32,676	16,195
	40	TOTAL* . ,,	1,80,693	§1,24,552	7,942	8,265	37,372	30,557
	41	Total working expenses excluding steam-boat †,,	22,77,682	21,25,829	‖4,65,782	‖4,63,441	6,22,637	6,83,013
	42	Steam-boat service . . . . . ,,	1,65,031	1,35,602	...	...	...	...
		GRAND TOTAL WORKING EXPENSES † ,,	24 42,713	22,61,431	‖4,65,782	‖4,63,441	6,22,637	6,83,013

* Includes alt other items
† Includes special contri-
§ Including the Sagauli
‖ Including-Powayan Light railway, detailed

DIX 45—*continued.*

Appendix 45.
Expenses under different heads.

(by systems) during each half year of 1902—contd.

19		20		21		22		23		No.
Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Mahratta.		South Indian.		Burma.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
3,305	3,277	29,477	28,181	1,35,455	1,38,347	1,40,633	1,26,132	1,36,476	1,29,848	1
8,632	8,264	58,425	57,493	2,01,645	2,12,079	1,11,776	1,26,243	2,97,053	3,65,631	2
428	2,505	26,863	12,922	1,98,680	2,22,433	2,85,858	1,05,272	1,83,150	95,877	
127	356	2,476	2,264	42,054	44,471	14,734	17,191	1,20,052	88,973	3
....	....	...	...	...	...	...	...	5,147	4,121	4
1,051	837	4,364	8,500	50,843	57,874	63,105	73,225	85,747	1,23,435	5
15,244	15,515	1,28,119	1,17,204	6,75,243	7,22,690	5,98,270	4,56,780	8,85,192	8,16,009	6
3,291	3,142	17,498	16,640	1,01,627	1,60,403	74,497	73,509	1,04,361	1,01,871	7
1,333	1,485	22,668	21,058	1,95,313	1,87,337	1,60,351	1,64,409	3,15,135	3,07,831	8
8,380	7,925	69,700	56,205	2,95,208	2,93,547	3,80,072	3,72,385	5,45,936	4,86,512	9
933	808	3,608	3,317	25,842	25,452	14,050	14,122	40,433	36,705	10
525	446	5,002	5,320	17,749	17,025	26,363	26,168	42,421	41,200	11
2,778	2,087	28,929	24,645	2,46,195	2,25,467	2,04,621	1,91,175	2,45,212	2,36,777	12
629	421	1,824	2,073	32,136	27,368	15,005	14,417	25,404	25,017	
17,869	16,235	1,51,704	1,26,836	10,53,409	10 67,546	8,86,527	9,01,887	13,86,574	13,29,434	13
380	402	5,258	4,956	29,688	30,513	24,741	24,440	29,771	29,492	14
3,663	6,039	11,065	6,444	1,02,323	96,098	89,422	1,25,096	90,370	1,00,550	
1,324	1,510	8,156	2,821	1,34,797	1,18,356	1,55,552	93,427	1,26,700	1,38,777	15
21	28	912	1,939	5,423	3,555	5,006	4,837	5,928	5,719	
624	628	3,658	3,592	20,442	20,880	27,689	27,941	37,318	35,937	16
6,062	8,660	29,069	18,866	2,91,456	2,68,717	2,92,541	2,72,387	2,94,884	3,13,963	17
3,520	3,603	18,779	20,533	85,666	81,280	66,815	69,095	85,395	82,828	18
3,928	3,376	48,863	42,893	1,95,614	1,90,732	1,87,511	1,96,238	2,83,754	2,71,918	19
464	403	7,368	7,373	72,192	66,439	43,703	45,852	73,082	73,770	20
825	812	9,452	11,650	45,949	37,654	44,163	30 399	68,559	64,643	21
99	168	1,007	393	8,595	13,143	3,918	6,992	7,697	16,451	22
1,140	749	7,728	7,639	30,210	29,913	28,674	56,536	36,603	50,991	23
....	...	...	...	...	...	49	29	....	....	24
10,421	9,662	98,146	94,894	4,73,859	4,51,658	3,84,143	4,15,014	5,62,564	5,67,669	25
....	...	2,384	2,365	1,20,676	90,896	43,730	43,412	94,128	89,981	26
3,036	2,836	12,673	12,492	40,071	34,424	25,213	25,311	31,042	32,393	27
2,036	1,818	27,277	25,359	92,744	88,388	82,158	83,531	75,884	80,666	28
226	257	6,006	5,952	23,888	23,705	21,258	22,373	23,294	23,972	29
465	427	7,169	7,518	20,111	20,754	18,804	20,598	16,640	17,789	30
895	504	5,798	6,961	19,579	19,775	15,729	17,133	6,418	6,893	31
...	...	17,820	17,382	46,330	44,812	34,076	25,871	51,702	43,092	32
...	...	150	100	2,466	2,004	396	1,251	1,841	2,261	33
1,699	1,596	21,010	21,259	1,00,180	1,03,400	72,176	69,886	88,689	87,637	34
8,357	7,438	1,00,311	99,392	4,75,664	4,29,190	3,55,381	3,54,837	3,99,558	3,95,421	35
...	...	172	216	615	1,557	164	232	772	625	36
51	1	643	218	980	1,597	1,607	1,355	143	3,043	37
...	...	10	...	7,059	1,448	9,412	12,181	17,029	4,990	38
2,125	1,738	3,824	2,042	7,540	4,107	6,263	6,612	...	...	39
2,558	2,165	23,450	14,344	80,318	75,169	49,346	53,873	83,770	71,343	40
60,511	59,745	5,30,790	4,71,536	30,49,949	30,14,970	26,04,614	24,92,872	36,12,536	34,93,839	41
...	...	...	...	...	...	...	...	79,981	43,633	42
60,511	59,745	5,30,790	4,71,536	30,49,949	30,14,970	26,04,614	24,92,872	36,92,517	35,37,472	

of expenditure not enumerated.
bution to Provident Fund.
Rajaul railway, details for which are not given.
information for which is not available.

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each railway

	No.	GAUGE.	2' 6"					
		CLASSIFICATION NUMBER.	24		25		26	
		Railway.	Morvi.		Barsi.		Tarakeshwar-Magra.	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	2,314	2,371	2,158	2,134	1,362	1,375
	2	Maintenance of permanent-way { Wages . ,,	11,227	10,829	2,605	2,600	2,723	2,575
		{ Material . ,,	746	1,099	55	55	29	90
	3	Repairs of bridges, etc. . . . . ,,	412	375	184	192	183	82
	4	Conservancy of rivers . . . . . ,,	...	...	...	...	...	...
	5	Repairs of stations and buildings . . . ,,	848	493	995	539	192	194
	6	TOTAL* . ,,	16,201	15,493	5,997	5,520	4,629	4,384
Locomotive.	7	General Superintendence . . . . ,,	3,184	3,228	832	800	585	589
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . . ,,	3,649	3,603	1,788	1,620	1,262	1,238
	9	Fuel . . . . . ,,	20,351	18,316	2,288	1,619	2,539	2,740
	10	Water . . . . . ,,	689	571	963	783	225	242
	11	Oil, tallow and other stores . . . . ,,	1,115	974	540	554	738	629
	12	Maintenance and renewal of, { Locomotive engines . ,,	3,116	3,464	2,871	1,881	1,325	1,649
		{ Machinery . . . ,,	14,548	4,732	211	48		
	13	TOTAL* . ,,	43,546	34,758	9,504	6,951	7,263	7,721
Carriage and Wagon.	14	General Superintendence . . . . ,,	1,683	1,581	407	400	585	592
	15	Repairs and renewal of { Coaching vehicles . ,,	1,072	973	493	616	1,942	1,599
		{ Goods ,, . ,,	608	401	362	268	158	162
		{ Machinery . . ,,	2,363	3,544	21	31	...	...
	16	Cleaning and oiling . . . . . ,,	1,074	685	404	384	270	311
	17	TOTAL* . ,,	6,726	7,356	1,687	1,699	2,962	2,664
Traffic.	18	General Superintendence . . . . ,,	2,890	2,481	563	630	516	515
	19	Station staff . . . . . ,,	7,841	7,179	4,013	2,914	3,956	4,040
	20	Train staff . . . . . ,,	1,392	1,319	354	325	761	846
	21	Fuel, lighting and general stores . . . ,,	2,465	2,270	2,180	291	520	581
	22	Clothing . . . . . ,,	258	129	102	76	...	18
	23	Printing, stationery and tickets . . . ,,	1,419	1,609	449	465	1,140	986
	24	Charges for delivery and collection of goods . ,,	195	435	...	...	...	...
	25	TOTAL* . ,,	16,762	15,528	9,876	6,500	8,099	8,200
General.	26	Home expenditure or General administration ,,	...	...	15,082	2,771	2,486	802
	27	Agent's Office . . . . . ,,	2,535	2,682	8,617	8,483	1,845	1,863
	28	Audit, accounts and pay office . . . ,,	5,868	6,702	600	600	1,973	1,952
	29	Stores Department . . . . . ,,	1,819	1,580	674	632	186	185
	30	Medical Department . . . . . ,,	308	314	776	772	156	155
	31	Rents and Miscellaneous . . . . ,,	412	550	747	695	338	325
	32	Police . . . . . ,,	1,300	...	140	585	...	...
	33	Advertising . . . . . ,,	97	...	...	...	...	104
	34	Electric telegraph . . . . . ,,	3,256	2,957	857	899	737	710
	35	TOTAL* . ,,	16,792	15,647	27,493	15,436	6,692	6,106
Miscellaneous.	36	Law charges . . . . . ,,	...	21	62	19	14	550
	37	Compensation . . . . . ,,	150	31	4,597	523	—19	8
	38	Rates and taxes . . . . . ,,	...	...	587	—30	...	...
	39	Payments to other lines . . . . . ,,	...	...	541	436	18	18
	40	TOTAL* . ,,	1,252	1,698	5,788	948	67	643
	41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT† . . . . . ,,	1,01,279	90,480	60,342	37,054	29,712	29,718
	42	Steam-boat service . . . . . ,,	...	...	...	...	...	...
		GRAND TOTAL WORKING EXPENSES† ,,	1,01,279	90,480	60,342	37,054	29,712	29,718

* Includes all other items of expenditure not enumerated.
† Includes special contribution to Provident Fund.

DIX 45—*concluded.*

(by systems) during each half-year of 1902—concld.

2′ 6″				2′ 0″								No.
27		28		29		30		31		32		
Ranaghat-Krishnagar. §		Tezpur-Balipara.		Darjeeling-Himalayan.		Howrah-Amta. §		Howrah-Sheakhala. §		Jorhat. §		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	1,615	2,046	14,164	12,841	...	...	...	...	...	...	1
...	...	1,918	1,976	10,241	10,593	...	...	...	...	...	...	2
...	...	1,623	2,690	12,292	9,440	...	...	...	...	...	...	
...	...	135	603	12,782	12,588	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	4
...	...	1,546	746	10,686	10,686	...	...	...	...	...	...	5
5,527	5,141	6,837	8,061	48,690	54,646	17,622	15,708	6,221	6,231	13,526	9,620	6
...	...	850	1,075	3,466	3,476	...	...	...	...	...	...	7
...	...	868	866	14,249	13,912	...	...	...	...	...	...	8
...	...	2,607	2,766	28,964	25,566	...	...	...	...	...	...	9
...	...	21	25	470	654	...	...	...	...	...	...	10
...	...	355	455	3,550	4,120	...	...	...	...	...	...	11
...	...	2,434	2,008	15,004	14,312	...	...	...	...	...	...	
...	...	...	...	9,694	8,524	...	...	...	...	...	...	12
6,645	5,722	7,135	7,195	74,193	70,525	15,083	17,568	4,678	5,486	13,815	13,396	13
...	...	625	825	3,021	3,023	...	...	...	...	...	...	14
...	...	1,482	1,325	8,364	6,235	...	...	...	...	...	...	
...	...	541	563	14,090	9,869	...	...	...	...	...	...	15
...	...	...	...	79	50	...	...	...	...	...	...	
...	...	317	304	1,760	1,461	...	...	...	...	...	...	16
1,601	1,229	2,965	3,017	23,937	19,985	5,148	3,584	1,329	1,052	9,423	845	17
...	...	1,310	1,710	2,405	2,788	...	...	...	...	...	...	18
...	...	2,176	2,404	14,644	15,947	...	...	...	...	...	...	19
...	...	562	564	6,596	6,593	...	...	...	...	...	...	20
...	...	154	223	4,911	4,931	...	...	...	...	...	...	21
...	...	...	3	196	97	...	...	...	...	...	...	22
...	...	320	394	854	869	...	...	...	...	...	...	23
...	...	1,994	2,101	4,234	4,444	...	...	...	...	...	...	24
10,975	11,065	7,371	8,273	33,840	35,669	20,866	21,241	9,576	9,612	8,207	8,957	25
...	...	264	1,360	21,555	20,093	...	...	...	...	...	...	26
...	...	1,180	1,530	4,604	4,556	...	...	...	...	...	...	27
...	...	2,347	2,346	8,844	9,159	...	...	...	...	...	...	28
...	...	101	126	...	...	...	...	...	...	...	...	29
...	...	539	482	2,822	2,784	...	...	...	...	...	...	30
...	...	401	390	2,295	2,878	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	211	141	...	...	...	...	...	...	33
...	...	498	498	4,417	4,410	...	...	...	...	...	...	34
3,393	3,314	5,300	6,732	44,379	43,645	7,341	7,151	2,976	2,809	6,937	5,977	35
...	...	28	30	32	424	...	...	...	...	...	...	36
...	...	...	...	289	138	...	...	...	...	...	...	37
...	...	151	103	4,438	4,024	...	...	...	...	...	...	38
...	...	...	...	2,967	2,891	...	...	...	...	...	...	39
...	...	251	224	7,726	7,477	...	...	...	...	197	296	40
28,248	26,579	29,859	33,502	2,36,582	2,35,694	66,612	65,765	24,939	25,341	51,205	39,091	41
...	...	...	...	...	...	...	...	...	...	...	...	42
28,248	26,579	29,859	33,502	2,36,582	2,35,694	66,612	65,765	24,939	25,341	51,205	39,091	

§ Details not furnished.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902.	East Indian.	Eastern Bengal.	Bengal Central	Bengal-Nagpur.	Raipur-Dhamtari (2′ 0″).	Oudh and Rohilkhand.	North-Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	DESCRIPTION OF RAILWAY WORKED.											
1	Gauge of railway	...	5′ 6″	5′ 6″	5′ 6″	5′ 6″	2′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″
2	Mileage worked . . . *Miles*	...	2,187·81	274·16	138·89	1,548·19	56·24	1,069·62	3,779·59	2,716·94	765·96	354·70
3	Number of stations . . *No.*	...	351	82	27	204	8	158	494	379	131	45
4	Total length of the following gradients:—											
	(*a*) $\frac{1}{80}$ and less . . *Miles*	...	5·9	...	...	...	...	...	71·12	19·31	...	...
	(*b*) $\frac{1}{81}$ to $\frac{1}{100}$ . . . „	...	16·78	...	...	0·98	...	9·30	84·97	9·11	1·32	...
	(*c*) $\frac{1}{81}$ to $\frac{1}{100}$ . . . „	...	38·33	...	...	30·11	...	6·41	134·21	73·29	0·50	79·19
	(*d*) $\frac{1}{101}$ to $\frac{1}{200}$ . . . „	...	242·52	...	...	460·19	18·60	19·15	108·69	277·71	167·86	110·99
	(*e*) $\frac{1}{201}$ to $\frac{1}{300}$ . . „	...	131·65	2·45	...	136·97	1·95	22·56	122·40	308·88	47·97	18·22
5	Steepest gradient worked—											
	(*a*) Inclination . .	...	$\frac{1}{80}$	$\frac{1}{300}$	$\frac{1}{200}$	$\frac{1}{44}$	$\frac{1}{143}$	$\frac{1}{175}$	$\frac{1}{82}$	$\frac{1}{87}$	$\frac{1}{80}$	$\frac{1}{100}$
	(*b*) Length . . . *Miles*	...	3·98	2·00	...	0·40	2·41	2·25	6·52	5·85	1·32	2·52
	FINANCIAL RESULTS.	Calendar year 1902 by half-years.										
6	Percentage of net earnings (including steam-boat traffic) for each half-year on capital outlay . *Per cent.*	1st half	4·82	2·35	1·99	1·09	1·12	2·71	1·81	*4·23	3·75	§3·27
		2nd „	4·11	4·96	2·40	1·23	−0·08	2·16	1·62	*2·14	2·10	§2·99
7	Percentage of net earnings for each half-year on paid up capital . . . *Per cent.*	1st half	...	...	1·99	1·83	1·12	...	...	†2·80	3·23	§2·77
		2nd „	...	...	2·44	1·14	−0·08	...	...	†1·30	1·89	§1·53
	OUTLAY EARNINGS AND EXPENSES. (*Exclusive of Steam-boat Service.*)											
8	Capital outlay per mile open . R	1st half	2,34,140	2,63,473	1,01,502	1,31,707	24,499	1,14,652	1,43,470	‡1,91,578	1,83,110	§1,26,860
		2nd „	2,23,543	2,60,646	1,02,709	1,33,918	24,644	1,16,572	1,44,726	‡1,94,892	1,93,468	§1,27,784
9	Total earnings per mile open per week . . . „	1st half	660	628	171	194	26	247	244	453	477	263
		2nd „	576	827	194	157	17	208	226	302	358	246
10	Total working expenses per mile open per week . . . „	1st half	234	385	99	88	16	124	140	194	204	105
		2nd „	218	318	107	99	17	109	133	185	203	98
11	Total earnings per train-mile . „	1st half	4·31	4·28	3·96	3·55	1·47	3·29	3·56	4·12	6·78	4·73
		2nd „	4·01	5·21	3·30	3·10	0·89	2·97	3·47	3·24	5·71	4·57
12	Total working expenses per train-mile . . . . „	1st half	1·53	2·62	2·30	1·61	0·88	1·66	2·05	1·76	2·89	1·88
		2nd „	1·52	2·00	1·82	1·77	0·93	1·55	2·04	1·98	3·24	1·83
13	Net earnings per train-mile . „	1st half	2·78	1·66	1·66	1·94	0·59	1·63	1·51	2·36	3·89	2·85
		2nd „	2·49	3·21	1·48	1·33	−0·04	1·42	1·43	1·26	2·47	2·74
14	Cost per 1,000 gross ton miles moved (freight and dead-weight) . . . . „	1st half	3·64	7·59	6·79	4·42	12·12	4·62	6·02	4·60	7·00	4·71
		2nd „	3·79	4·92	6·75	5·21	17·11	4·58	6·10	6·31	8·72	4·94
15	Percentage of total working expenses on total earnings *Per cent.*	1st half	34·89	61·26	58·05	45·35	60·02	50·46	57·50	42·80	42·64	39·82
		2nd „	37·87	38·41	55·00	57·12	104·53	52·25	58·91	61·19	56·67	39·96
16	Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores . . . . *Per cent.*	1st half	33·33	61·90	57·84	43·60	57·29	48·86	55·72	41·48	41·67	38·85
		2nd „	36·22	38·30	54·76	55·01	105·35	50·41	57·33	59·78	55·90	38·74
17	(*Inclusive of Steam-boat Service.*) Percentage of total working expenses on total earnings (for details, see items 123—29 *Per cent.*	1st half	35·60	61·26	58·05	45·75	60·02	50·46	57·52	42·80	42·64	39·82
		2nd „	38·02	38·41	55·00	57·65	104·53	52·25	58·98	61·19	56·67	39·96

* Great Indian Peninsula railway only.
† Indian Midland railway only.
‡ Great Indian Peninsula railway
§ Nizam's railway only.
‖ Calculated on the mileage, excluding
¶ Including the Cawnpore-Burhwal

DIX 46.

(by systems) during each half-year of 1902.

prepared by the railways not shown.

	3′ 3⅜″											GAUGE.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. ‖	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902.	
5′ 6″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	...	1
1,387·36	710·98	589·21	1,343·88	278·30	1,824·33	763·75	68·72	455·45	391·42	1,646·20	1,162·31	1,182·08	...	2
284	116	86	239	46	258	83	7	64	46	229	209	197	...	3
...	0·37	...	...	...	3·40	...	...	...	...	15·40	...	51·79	...	4
22·84	0·64	1·26	...	6·41	0·23	...	...	0·07	...	48·92	...	27·23	...	
49·43	2·05	7·06	...	7·29	18·75	...	1·10	0·34	...	537·07	119·83	43·30	...	
270·68	20·81	80·61	5·26	4·40	307·80	165·92	30·75	121·23	221·73	250·35	222·74	147·83	...	
153·53	14·65	28·03	3·66	5·81	153·63	59·59	6·98	63·90	13·95	95·69	96·53	101·41	...	
1/80	1/80	1/65	1/200	1/70	1/40	1/130	1/100	1/82	1/185	1/40	1/100	1/85	...	5
0·80	0·37	0·57	3·42	3·00	3·40	2·31	0·46	0·07	5·41	15·40	3·56	9·81	...	
													Calendar year 1902 by half-years.	
2·26	2·05	0·16	3·44	5·03	5·90	4·17	3·02	1·99	3·00	1·51	3·59	3·03	1st half	6
1·50	3·23	0·19	1·98	2·65	3·35	1·89	1·68	1·03	0·85	0·92	3·51	1·68	2nd ,,	
2·28	...	...	...	...	...	...	...	...	2·77	...	...	2·62	1st half	7
1·52	...	...	...	...	...	...	...	...	0·81	...	...	1·48	2nd ,,	
1,35,191	85,241	1,18,661	75,165	42,820	75,930	25,174	30,693	¶49,831	62,456	79,511	69,444	90,858	1st half	8
1,37,054	90,912	1,20,704	76,613	44,443	76,647	24,870	30,693	¶49,869	65,205	85,454	68,345	85,589	2nd ,,	
247	188	65	171	142	312	74	70	82	137	115	189	230	1st half	9
214	209	70	123	114	226	53	54	59	88	101	176	176	2nd ,,	
121	89	57	71	58	131	32	35	44	63	68	89	118	1st half	10
130	92	61	64	63	128	33	34	39	67	70	78	113	2nd ,,	
3·85	3·12	3·06	2·75	3·27	4·46	2·92	4·81	3·74	3·29	2·67	3·20	3·73	1st half	11
3·37	3·41	2·49	2·12	2·58	3·73	2·34	3·56	3·06	2·34	2·41	3·03	2·92	2nd ,,	
1·90	1·48	2·22	1·14	1·34	1·75	1·28	2·37	2·01	1·51	1·59	1·51	1·92	1st half	12
2·05	1·50	2·17	1·11	1·43	2·05	1·47	2·25	2·04	1·77	1·68	1·35	1·88	2nd ,,	
1·95	1·64	0·35	1·61	1·93	2·41	1·64	2·44	1·73	1·78	1·08	1·69	1·82	1st half	13
1·32	1·91	0·32	1·01	1·16	1·68	0·86	1·31	1·02	0·57	0·73	1·68	1·04	2nd ,,	
5·67	8·29	12·63	5·42	7·37	6·74	6·37	11·11	11·02	6·87	8·44	8·44	8·73	1st half	14
6·92	7·76	10·32	5·86	8·27	8·65	8·36	11·84	12·09	9·16	9·15	7·60	9·35	2nd ,,	
49·24	47·43	88·68	41·28	40·95	41·95	43·84	49·21	53·80	46·06	59·42	47·07	51·23	1st half	15
60·96	43·97	87·19	52·47	55·16	54·91	63·12	63·27	66·64	75·70	69·79	44·59	64·47	2nd ,,	
48·15	44·45	88·55	39·98	40·28	41·10	42·54	48·71	53·63	45·50	58·13	46·55	50·45	1st half	16
59·87	41·45	86·90	51·44	54·31	53·99	61·93	63·26	66·73	74·09	68·11	43·79	63·53	2nd ,,	
49·24	51·36	88·51	41·35	40·58	41·95	43·84	49·21	53·80	46·06	59·42	47·07	52·25	1st half	17
60·96	47·97	87·26	52·25	54·71	54·91	63·12	63·27	66·64	75·70	69·79	44·59	65·09	2nd ,,	

Indian Midland railway for 1st and 2nd halves 2·89 and 1·34, respectively.

only. Indian Midland railway for 1st and 2nd halves 1,31,692 and 1,32,743, respectively.

the dock estates and quarry lines constructed and maintained by the Native states as separate undertakings.
(metre gauge link) in items 1, 2 and 9 to 17.

P. T. O.

Appendix 46.
Analysis.

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal Nagpur.	Raipur-Dhamtari (2′ 6″.)	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.											
18	Total working expenses for both coaching and goods traffic* in thousands of Rs. . *R*	1st half	1,27,17	23,92	2,54	33,64	22	30,75	1,31,91	1,33,59	41,61	9,53
		2nd ,,	1,20,89	20,21	3,76	34,39	25	28,34	1,25,70	1,29,08	41,90	7,57
	Proportions, *dividing expenditure in ratio of gross ton-mileage (freight and dead load)*—											
19	Coaching in thousands of Rs. . ,,	1st half	30,85	9,57	1,52	11,42	9	11,95	40,45	32,59	15,62	2,04
		2nd ,,	34,06	6,53	1,71	13,44	12	12,29	42,86	47,16	19,02	1,70
20	Goods in thousands of Rs. . ,,	1st half	96,32	14,35	97	22,22	13	18,80	91,46	1,01,01	25,99	7,49
		2nd ,,	86,82	13,67	2,05	20,94	13	16,04	82,84	81,92	22,88	5,87
	COACHING TRAFFIC.											
	Gross receipts and train mileage (in thousands)—											
21	Receipts from coaching traffic *R*	1st half	1,08,95	16,61	3,93	29,84	18	29,61	75,75	71,30	31,59	4,99
		2nd ,,	1,11,28	16,61	3,85	28,99	14	27,64	80,14	70,02	28,84	4,64
22	Coaching train-miles run . .	1st half	3,101	535	91	914	12	1,127	2,846	2,821	857	157
		2nd ,,	33,51	569	114	995	15	1,176	2,997	3,302	872	139
23	Average coaching receipts per train-mile . . . . *R*	1st half	3·48	3·10	4·32	5·26	1·48	2·63	2·66	2·53	3·69	3·18
		2nd ,,	3·32	2·92	3·39	2·91	0·98	2·35	2·67	2·14	3·31	3·33
	UNITS AND UNIT-MILEAGE—											
	Number of units carried one mile (in thousands)—											
24	1st class . . . *Unit miles*	1st half	4,593	918	48	1,132	1	1,474	3,601	6,155	1,785	386
		2nd ,,	5,855	722	48	960	2	1,574	3,799	7,973	1,644	352
25	2nd ,, ... ,,	1st half	13,812	1,975	256	2,713	5	4,747	11,564	33,177	11,428	1,831
		2nd ,,	15,947	1,966	305	2,899	4	5,938	13,310	32,738	9,436	1,956
26	3rd or intermediate class ,,	1st half	46,842	10,179	1,158	5,647	19	13,108	35,974	‡44,138	23,338	‡5,077
		2nd ,,	49,016	11,197	1,302	5,520	16	14,393	40,294	‡45,248	22,549	‡4,954
27	4th or lowest ,, ,,	1st half	621,515	91,986	21,091	206,899	1,543	175,495	479,797	‖372,327	172,648	‖27,859
		2nd ,,	603,243	87,666	20,123	196,819	1,213	152,514	484,025	‖320,267	146,444	‖25,601
28	Total passenger unit-mileage ,,	1st half	686,768	105,058	22,553	216,392	1,569	194,825	530,936	455,797	209,199	35,153
		2nd ,,	674,063	101,551	21,778	206,204	1,235	174,449	544,428	406,221	180,053	32,860
29	Other coaching traffic . *Ton-miles*	1st half	8,873	635	137	1,106	5	1,507	5,011	7,829	2,441	424
		2nd ,,	10,691	888	135	1,381	4	1,656	6,607	8,693	3,016	399
	Average sum received for carrying a unit one mile—											
30	1st class . . . . *Pies*	1st half	14·09	14·04	14·16	14·85	16·67	11·39	10·89	10·61	9·99	12·94
		2nd ,,	15·11	13·60	14·09	13·96	15·28	11·60	11·02	11·02	10·37	12·82
31	2nd ,, ... ,,	1st half	5·79	6·76	7·41	6·04	6·71	5·18	4·29	3·63	4·72	4·37
		2nd ,,	6·18	6·60	7·04	5·75	6·69	4·98	4·36	3·92	5·10	4·25
32	3rd or intermediate class . ,,	1st half	3·23	3·06	3·53	3·19	3·09	3·03	3·01	‡2·99	2·99	‡2·50
		2nd ,,	3·33	2·99	3·43	3·20	3·00	3·03	2·58	‡2·98	2·99	‡2·50
33	4th or lowest ,, . ,,	1st half	2·44	2·49	3·00	2·30	2·00	2·41	2·27	‖2·11	2·26	‖1·98
		2nd ,,	2·44	2·49	3·00	2·32	2·00	2·45	2·27	‖2·15	2·29	‖1·98
34	Average for all classes . ,,	1st half	2·64	2·73	3·10	2·44	2·04	2·59	2·42	2·42	2·54	2·30
		2nd ,,	2·70	2·70	3·11	2·45	2·04	2·66	2·44	2·56	2·60	2·31
35	Other coaching traffic per ton-mile	1st half	29·33	51·27	40·90	41·39	40·49	42·91	33·70	33·88	30·66	34·77
		2nd ,,	29·65	50·15	46·79	35·35	40·94	39·86	33·12	36·51	28·33	33·02

* Excluding steam-boat expenses, and after deducting telegraph

† For "freight" passenger units (items 24 to 27) have been
First class passenger with free luggage . . . .
Second ,, ,, ,, ...
Third or fourth class passenger with free luggage . .
plus the ton-mileage of

‡ Third class by

§ Including the

‖ Third class by

DIX 46—*continued.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3⅜″											Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. §	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar	Hyderabad. Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
41,33	15,94	8,24	22,68	4,27	59,77	5,93	60	5,07	5,40	27,73	25,60	35,13	1st half	18
45,79	16,72	8,51	20,76	4,10	57,64	6,65	59	4,50	6,29	29,47	23,62	34,06	2nd „	
13,95	5,37	4,41	9,22	1,42	12,26	2,22	31	2,49	2,16	9,37	11,99	12,65	1st half	19
17,16	5,52	3,62	10,68	1,67	18,54	3,24	38	2,79	3,03	10,79	11,70	13,54	2nd „	
27,38	10,57	3,83	13,46	2,85	47,51	3,71	29	2,58	3,21	18,36	13,61	24,48	1st half	20
28,63	11,20	4,89	10,08	2,43	39,10	3,41	21	1,71	3,26	18,68	11,92	20,52	2nd „	
34,14	14,89	6,10	22,64	4,23	36,35	4,82	51	4,98	4,71	17,67	29,08	30,66	1st half	21
31,89	14,66	5,21	22,63	3,71	35,75	5,00	52	4,33	3,91	17,19	30,61	25,34	2nd „	
1,607	511	176	1,142	141	1,056	190	13	141	159	705	874	728	1st half	22
1,023	526	173	1,211	157	1,173	239	17	151	166	736	969	789	2nd „	
3·39	2·91	3·47	1·98	3·00	3·44	2·54	3·99	3·53	2·97	2·51	3·33	4·21	1st half	23
3·12	2·79	3·02	1·87	2·35	3·05	2·09	3·16	2·87	2·35	2·34	3·16	3·21	2nd „	
2,457	459	154	399	150	1,002	1,31	12	128	266	883	891	891	1st half	24
2,201	423	157	438	138	1,354	1,64	18	125	207	999	848	732	2nd „	
7,085	1,368	309	875	876	3,455	6,8+	30	829	1,307	2,909	3,479	3,278	1st half	25
8,437	1,439	321	1,091	1,042	3,931	7,15	57	852	1,339	3,531	3,101	2,648	2nd „	
1,076	5,387	148	2,883	327	9,263	...	65	1,120	...	...	...	...	1st half	26
955	6,068	159	2,931	285	9,863	...	80	1,086	...	...	...	...	2nd „	
221,669	90,805	34,927	195,059	27,907	279,338	37,120	42,12	28,279	35,277	128,551	246,589	173,361	1st half	27
209,238	85,228	28,459	193,651	22,507	254,495	36,629	40,17	23,506	28,325	119,106	256,668	141,712	2nd „	
232,287	98,017	35,538	199,216	29,260	293,056	37,932	43,19	30,456	36,850	132,343	250,899	177,530	1st half	28
220,831	93,158	29,096	198,111	23,972	269,693	37,508	41,72	25,569	29,871	123,636	260,677	145,093	2nd „	
2,661	473	166	592	133	2,493	2,92	20	140	225	1,032	651	714	1st half	29
2,081	712	212	689	142	3,256	3,01	35	169	350	1,119	657	872	2nd „	
12·08	13·88	15·06	12·57	25·34	13·49	13·32	17·70	11·29	10·06	11·26	11·69	15·25	1st half	30
12·34	13·78	14·82	13·05	27·38	13·73	14·96	17·89	11·22	10·35	12·16	13·62	12·50	2nd „	
5·15	6·58	7·68	5·90	7·68	6·10	6·00	8·87	5·63	4·42	5·10	5·96	7·76	1st half	31
4·33	6·03	7·45	5·23	6·94	6·45	6·00	8·89	5·58	4·32	5·05	5·86	8·76	2nd „	
4·53	3·14	4·44	3·04	4·00	2·98	...	3·00	4·00	...	...	...	...	1st half	32
4·59	3·07	4·49	3·07	4·01	2·99	...	3·00	4·00	...	...	...	...	2nd „	
2·26	2·50	3·00	2·00	2·18	2·00	2·05	1·99	2·75	2·00	2·09	2·02	3·01	1st half	33
2·22	2·50	3·00	2·00	2·21	2·00	2·06	1·99	2·75	2·00	2·10	2·05	2·98	2nd „	
2·46	2·65	3·10	2·05	2·49	2·12	2·16	2·10	2·92	2·14	2·22	2·10	3·16	1st half	34
2·41	2·64	3·12	2·06	2·58	2·16	2·19	2·17	2·94	2·16	2·27	2·13	3·16	2nd „	
31·71	56·32	42·14	43·46	63·18	30·84	35·96	27·58	47·73	50·71	44·68	48·45	38·45	1st half	35
38·33	49·61	43·73	33·78	65·65	31·71	35·50	24·50	47·86	30·04	44·72	49·41	32·83	2nd „	

and sundry receipts, and leaving only the balance of payments to other lines for mileage, etc. converted into tons at the following rates, *viz.* :—

. . . 0·10 ton.
. . . 0·08 „
. . . 0·06 „

other coaching trains.
mail trains.
Cawnpore-Burhwal link.
other than mail trains.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gauge.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	COACHING TRAFFIC—*contd.*											
	UNITS AND UNIT-MILEAGE—*concld.*											
	Average number of units in a train—											
36	1st class . . No.	1st half	1·48	1·71	0·52	1·23	0·13	1·31	1·27	2·18	2·08	2·47
		2nd „	1·75	1·27	0·42	0·97	0·11	1·34	1·27	2·42	1·86	2·53
37	2nd „ . . „	1st half	4·45	3·69	2·82	2·97	0·40	4·21	4·06	11·76	13·33	11·68
		2nd „	4·76	3·46	2·69	2·91	0·24	5·05	4·44	9·92	10·82	14·06
38	3rd or intermediate class „	1st half	15·11	19·02	12·72	6·18	1·61	11·63	12·64	15·65	27·22	210·09
		2nd „	14·62	19·69	11·47	5·55	1·08	12·23	13·45	13·70	25·86	219·57
39	4th or lowest „ „	1st half	200·40	171·87	231·77	226·26	129·12	155·71	168·60	132·00	201·40	
		2nd „	180·01	154·19	172·28	192·83	80·50	129·65	161·52	97·60	167·92	
40	Total passenger units „	1st half	221·44	196·29	247·83	236·64	131·26	172·86	186·57	161·53	244·03	224·24
		2nd „	201·14	178·61	191·86	207·26	81·93	148·27	180·68	123·04	205·46	239·16
41	Other coaching traffic *Tons*	1st half	2·86	1·19	1·50	1·21	0·40	1·34	2·76	2·78	2·85	2·70
		2nd „	3·19	1·56	1·19	1·39	0·27	1·41	2·20	2 63	3·46	2·87
	VEHICLES AND VEHICLE-MILEAGE—											
	Number of coaching vehicles (in thousands) hauled one mile—											
42	1st class . . *Vehicle-miles*	1st half	4,886	618	76	1,270	4	1,471	3,556	4,469	901	363
		2nd „	5,124	641	93	1,272	4	1,602	3,516	4,939	901	345
43	2nd „ . . „	1st half	4,688	595	112	1,322	4	1,288	3,463	5,652	1,703	307
		2nd „	4,801	610	134	1,275	4	1,296	3,400	5,680	1,676	330
44	3rd or intermediate class „	1st half	4,630	1,204	141	905	107	1,722	4,026	2,952	1,107	1,561
		2nd „	5,116	1,238	166	1,036		1,966	4,080	3,359	994	
45	4th or lowest „ „	1st half	29,077	3,975	828	11,134	85	8,179	24,820	16,400	7,076	1,631
		2nd „	30,567	4,047	920	10,778		7,851	26,140	17,503	6,549	
46	Other vehicles „	1st half	4,614	1,004	226	1,219	6	947	2,700	4,785	1,637	307
		2nd „	5,209	1,089	223	1,189	4	860	3,000	5,628	1,759	246
47	Brake-vans „	1st half	5,479	536	155	1,857	24	2,086	5,298	5,172	1,104	350
		2nd „	5,802	569	161	1,947	29	2,193	5,599	6,013	1,135	360
48	Total „	1st half	53,374	7,932	1,538	17,707	145	15,690	43,863	39,430	13,528	2,888
		2nd „	56,649	8,194	1,697	17,493	126	15,768	45,735	43,127	13,014	2,912
	Average number of vehicles in a coaching train—											
49	1st class . *No.*	1st half	1·57	1·15	0·84	1·39	0·34	1·30	1·28	1·59	1·05	1·17
		2nd „	1·53	1·12	0·82	1·28	0·30	1·36	1·17	1·50	1·03	1·10
50	2nd „ . „	1st half	1·51	1·11	1·23	1·44	0·35	1·14	1·22	2·00	1·99	1·00
		2nd „	1·43	1·07	1·18	1·28	0·30	1·10	1·14	1·72	1·92	1·05
51	3rd or intermediate class „	1st half	1·49	2·25	1·55	0·99	2·93	1·53	1·41	*1·05	1·29	5·05
		2nd „	1·53	2·18	1·46	1·04	5·62	1·67	1·36	*1·02	1·14	5·20
52	4th or lowest „ „	1st half	9·38	7·43	9·10	12·18		7·26	8·72	†5 81	8·25	
		2nd „	9·12	7·12	8 10	10·83		6·67	8·78	†5·30	7 51	
53	Other vehicles „ „	1st half	1·49	1·88	2·49	1·33	0·47	0·84	0·95	1.70	1·91	0·99
		2nd „	1·55	1·92	1·96	1·19	0·26	0·73	1·00	1·70	2·02	0·78
54	Brake-vans „	1st half	1·77	1·00	1·70	2·03	1·99	1·85	1·86	1·83	1·29	1·13
		2nd „	1·73	1·00	1·42	1·96	1·90	1·87	1·86	1·82	1·30	1·15
55	Total . „	1st half	17·21	14·82	16·91	19·36	12·08	13·92	15·41	13·28	15·78	9·34
		2nd „	16·89	14·41	14·94	17·58	8·38	13·40	15·26	13·06	14·92	9·28
	Average earnings per coaching vehicle per mile—											
56	1st class . *Pies*	1st half	13·24	20·85	8·89	13·25	6·19	11·42	10·72	14·61	19·79	13·77
		2nd „	17·26	15·33	7·23	10·54	5·48	11·39	11·90	17·79	18·70	13·10
57	2nd „ . „	1st half	17·07	22·46	17·00	12·40	7·86	19·15	14·33	21·33	31·66	26·06
		2nd „	20·54	21·26	16·03	13·08	5·23	22·83	17·05	22·60	28·12	25·19
58	3rd or intermediate class „	1st half	32·66	25·86	28·93	19·90	29·47	23·05	26·93	44·70	63·10	43·55
		2nd „	31·89	27·01	26·96	17·07	29·24	22 18	29·86	40·19	67·91	38·63
59	4th or lowest „ „	1st half	52·22	57·60	76·89	42·75		51·68	43·80	47·91	55·22	
		2nd „	48·07	53·90	63·62	42·44		47·55	42·01	39·25	51·27	
60	Other vehicles „	1st half	56·41	32·43	24·73	41·27	34·52	68·30	62·54	55·43	45·73	48·11
		2nd „	60·85	40·89	28·23	41·17	42·77	76·80	72·91	56·39	48·57	53·69

* Third class by
† Third class by
‡ Including Cawn

DIX 46—*contd.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3½″												Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. ‡	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
2·44	0·90	0·87	0·35	1·07	0·95	0·69	0·98	0·91	1·67	1·25	1·02	1·22	1st half	36
2·15	0·80	0·91	0·36	0·88	1·15	0·68	1·09	0·83	1·24	1·36	0·87	0·93	2nd ,,	
7·03	2·67	1·75	0·77	6·22	3·27	3·59	2·33	6·59	8·24	4·13	3·91	4·50	1st half	37
8·25	2·74	1·86	0·90	6·62	3·40	2·99	3·42	5·64	8·05	4·80	3·26	3·35	2nd ,,	
1·07	10·54	0·84	2·52	2·32	8·77	...	5·09	7·95	...	...	...	...	1st half	38
0·93	11·54	0·92	2·42	1·81	8·41	...	4·81	7·18	...	...	...	...	2nd ,,	
220·16	177·69	198·52	170·86	198·27	264·56	195·71	330·84	200·67	222·40	182·29	282·23	238·19	1st half	39
204·56	162·08	164·92	159·92	142·98	217·93	153·17	241·81	185·50	120·24	161·85	264·79	179·50	2nd ,,	
230·70	198·80	201·98	174·50	209·88	277·55	199·99	339·24	216·12	232·31	187·67	287·16	243·82	1st half	40
215·89	177·16	168·01	163·60	152·29	229·99	156·84	251·13	169·15	179·54	168·01	268·92	183·78	2nd ,,	
2·64	0·93	0·94	0·52	0·94	2·36	1·53	1·60	0·99	1·42	1·46	0·75	0·98	1st half	43
2·03	1·35	1·20	0·57	0·90	2·78	1·63	2·13	1·12	2·10	1·52	0·68	1·19	2nd ,,	
1,358	701	310	1,763	217	1,711	2,91	17	294	317	1,026	975	1,235	1st half	42
1,339	634	307	1,888	209	1,953	325	20	281	330	1,233	1,045	1,212	2nd ,,	
1,544	668	280	1,606	193	1,656	3,08	17	429	314	1,078	1,172	1,579	1st half	43
1,558	588	296	1,682	200	1,849	3,28	22	400	306	1,258	1,257	1,563	2nd ,,	
250	1,059	251	1,689	108	915	...	27	261	...	...	...	...	1st half	44
280	1,148	242	1,864	114	1,029	...	27	290	...	...	...	...	2nd ,,	
9,047	4,616	2,276	14,516	1,687	17,295	25,68	2,12	1,783	1,519	8,667	12,426	11,443	1st half	45
9,463	5,254	2,174	15,781	1,831	17,852	27,71	2,27	1,746	1,672	9,146	13,439	10,999	2nd ,,	
1,396	690	264	319	88	1,010	3,39	4	112	151	924	1,110	911	1st half	46
1,210	843	398	366	107	1,567	2,86	7	120	209	990	1,294	585	2nd ,,	
2,154	478	233	2,956	264	3,283	6,61	50	398	354	1,932	1,065	1,936	1st half	47
2,147	491	215	2,494	302	3,380	7,79	53	403	297	1,742	1,166	1,154	2nd ,,	
15,749	8,213	3,714	21,949	2,557	25,790	41,67	3,27	3,277	2,655	12,725	16,748	16,204	1st half	48
13,097	8,958	3,632	24,075	2,763	27,630	44,89	3,56	3,240	2,816	13,769	18,201	15,493	2nd ,,	
1·35	1·37	1·76	1·54	1·55	1·62	1·53	1·31	2·09	1·11	1·46	1·12	1·70	1st half	49
1·31	1·21	1·78	1·56	1·33	1·66	1·36	1·19	1·86	1·11	1·68	1·08	1·53	2nd ,,	
1·53	1·31	1·59	1·41	1·37	1·57	1·63	1·31	3·04	1·09	1·53	1·34	2·11	1st half	50
1·52	1·12	1·71	1·39	1·27	1·58	1·37	1·34	2·66	1·04	1·71	1·30	1·98	2nd ,,	
0·25	2·07	1·43	1·48	0·77	0·87	...	2·16	1·85	...	...	...	...	1st half	51
0·28	2·18	1·40	1·54	0·72	0·88	...	1·64	1·92	...	...	...	...	2nd ,,	
8·98	9·03	12·94	12·72	11·98	16·38	13·34	16·66	12·66	5·28	12·29	14·22	15·74	1st half	52
9·25	9·99	12·60	13·03	11·63	15·22	11·58	13·69	11·54	5·67	12·43	13·86	13·91	2nd ,,	
1·39	1·35	1·50	0·28	0·62	0·96	1·79	0·29	0·80	0·53	1·31	1·27	1·25	1st half	53
1·48	1·00	2·31	0·30	0·68	1·34	1·20	0·41	0·99	0·71	1·34	1·34	0·74	2nd ,,	
2·14	0·94	1·32	1·80	1·88	3·03	3·48	3·95	2·82	1·23	1·46	1·22	1·42	1st half	54
2·10	0·94	1·25	2·06	1·92	2·88	3·26	3·19	2·66	1·01	1·55	1·20	1·46	2nd ,,	
15·64	16·07	20·54	19·23	18·17	24·43	21·97	25·68	23·26	9·24	18·05	19·17	22·26	1st half	55
15·64	17·04	21·05	19·88	17·55	23·56	18·77	21·46	21·43	9·54	18·71	18·78	19·62	2nd ,,	
21·84	9·09	7·48	2·85	17·57	7·90	6·02	13·19	4·91	8·12	9·69	10·69	11·06	1st half	56
20·28	9·18	7·37	3·17	18·08	9·52	7·54	16·47	4·99	6·50	9·85	9·43	10·58	2nd ,,	
23·64	13·46	8·45	3·21	34·79	12·71	13·28	15·72	12·20	18·42	13·76	14·76	16·11	1st half	57
23·44	14·76	8·08	3·39	36·25	13·88	13·08	22·76	11·87	18·86	14·17	14·74	14·83	2nd ,,	
19·48	15·96	2·62	5·19	12·16	30·22	...	7·66	17·15	...	...	...	...	1st half	58
15·34	16·22	2·96	4·82	9·97	28·64	...	8·79	14·95	...	...	...	...	2nd ,,	
55·28	49·18	46·03	26·87	36·10	32·31	29·68	39·55	43·61	46·45	30·97	40·17	45·64	1st half	59
49·09	40·55	39·27	24·53	27·14	28·53	27·21	35·15	37·03	33·83	27·34	39·21	38·43	2nd ,,	
60·45	38·63	26·55	80·53	95·72	76·11	30·97	150·28	59·51	75·32	49·91	28·44	30·12	1st half	60
65·93	41·92	23·29	72·89	87·25	65·91	48·44	128·25	67·40	50·23	50·57	25·06	48·93	2nd ,,	

mail trains.
other than mail trains.
pore-Burhwal link.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2(a)	3	4(a)	4(b)	5 (a) & (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	COACHING TRAFFIC—*contd.* VEHICLES AND VEHICLE-MILEAGE—*concld.*											
	Carrying capacity hauled one mile (excluding brakes) (in thousands)—											
61	1st class . . . . *Seats*	1st half	70,261	12,721	1,445	16,085	49	31,345	51,776	58,701	21,638	4,846
		2nd ,,	71,735	13,824	1,750	15,203	54	35,212	53,101	64,943	20,543	4,703
62	2nd ,, ... ,,	1st half	104,578	15,244	2,338	23,485	49	35,351	75,373	146,845	74,275	6,878
		2nd ,,	107,003	15,668	2,824	22,699	54	29,388	68,647	141,952	71,196	7,356
63	3rd or intermediate class . ,,	1st half	226,167	69,444	7,703	32,667		60,464	137,783	*226,611	60,066	
		2nd ,,	244,828	63,089	9,119	39,395	3,243	68,487	138,973	*181,977	51,531	91,139
64	4th or lowest class . . ,,	1st half	1,717,607	228,848	45,886	603,000	2,590	423,361	1,295,470	†880,811	395,947	93,419
		2nd ,,	1,801,972	233,999	51,143	575,237		431,976	1,364,477	†884,524	369,894	
65	Other vehicles . . . *Tons*	1st half	44,099	9,224	3,868	9,984	3	28,127	34,305	26,319	8,147	5,544
		2nd ,,	48,409	10,043	3,568	9,960	2	18,046	38,459	28,870	9,290	4,766
	Percentage of freight upon capacity hauled—											
66	1st class . . . *Per cent.*	1st half	6·54	7·21	3·30	7·04	3·10	4·70	6·96	10·48	8·25	7·97
		2nd ,,	8·16	5·22	2·74	6·32	2·99	4·47	7·16	12·28	7·90	7·50
67	2nd ,, ... ,,	1st half	13·21	12·96	10·97	11·55	9·76	13·43	15·34	22·59	15·39	26·62
		2nd ,,	14·90	12·55	10·81	12·77	6·60	20·21	19·39	23·06	13·25	26·63
68	3rd or intermediate class . ,,	1st half	20·71	14·66	15·03	17·28		21·68	26·11	*19·48	38·85	
		2nd ,,	20·02	17·75	14·28	14·03	48·17	21·02	28·99	*24·86	43·76	36·14
69	4th or lowest class . ,,	1st half	36·18	40·29	45·06	34·31	47·47	41·45	37·04	†42·27	43·60	32·70
		2nd ,,	33·48	37·46	39·34	34·22		35·38	35·47	†36·21	39·59	
70	Other vehicles . . ,,	1st half	20·12	6·88	3·54	11·07	177·60	5·36	14·61	29·75	29·97	7·65
		2nd ,,	22·08	8·84	3·78	13·86	317·62	9·18	17·18	30·11	32·46	8·38
	WEIGHT OF TRAIN AND TON-MILEAGE.											
	Gross ton-mileage of all coaching trains (in thousands)—											
71	Freight	1st half	50,539	7,015	1,497	14,087	99	13,350	37,242	36,087	15,293	2,586
		2nd ,,	51,688	7,049	1,449	13,149	78	12,303	39,505	34,040	14,073	2,424
72	Dead weight	1st half	796,158	119,034	21,606	244,112	605	245,300	634,502	672,620	207,731	40,759
		2nd ,,	846,835	125,782	24,500	244,126	604	256,035	662,683	713,618	202,951	39,590
73	Total	1st half	846,697	126,049	23,103	258,199	704	258,650	671,744	708,707	223,024	43,345
		2nd ,,	898,523	132,831	25,949	257,975	682	268,338	702,188	747,658	217,024	42,014
	Average weight of a coaching train—											
74	Freight . . . . . *Tons*	1st half	16·29	13·11	16·48	15·40	8·29	11·85	13·09	12·79	17·84	8·26
		2nd ,,	15·42	12·40	12·27	13·92	5·19	10·46	13·18	10·31	16·14	7·68
75	Dead weight . . . . . ,,	1st half	256·71	222·40	237·43	266·96	50·64	217·64	222·06	238·46	242·32	130·18
		2nd ,,	252·69	221·23	215·83	245·37	40·06	217·65	221·15	216·14	232·71	125·40
76	Total . . . . . ,,	1st half	273·00	235·51	253·88	282·36	58·93	229·49	236·05	251·25	260·16	138·44
		2nd ,,	268·11	233·63	228·60	259·29	45·25	228·11	234·33	226·45	248·85	133·08
	COST OF WORKING AND PROFIT—											
77	Average cost of hauling a coaching train one mile . . . ₹	1st half	0·99	1·79	1·72	1·24	0·71	1·06	1·42	1·16	1·82	1·30
		2nd ,,	1·02	1·15	1·51	1·35	0·77	1·04	1·43	1·43	2·18	1·22
78	Average cost of hauling a coaching vehicle with its load one mile . . . . . *Pies*	1st half	12·37	24·85	21·77	15·21	13·59	16·87	20·14	18·26	24·14	15·46
		2nd ,,	12·87	16·45	21·42	16·60	22·93	17·39	20·51	24·40	30·75	12·54
	Average cost of hauling a coaching unit one mile—											
79	Per passenger unit . . . *Pies*	1st half	0·78	1·51	1·19	0·94	0·99	1·19	1·36	1·20	1·27	0·99
		2nd ,,	0·87	1·04	1·45	1·17	1·74	1·28	1·40	1·90	1·77	0·90
80	Other traffic per ton . . . ,,	1st half	6·35	40·21	23·85	13·78	15·83	9·66	10·75	10·23	13·78	10·10
		2nd ,,	6·26	21·92	27·37	12·82	22·93	8·16	9·50	15·14	15·68	7·56
81	Average profit on working a coaching train one mile . . ₹	1st half	2·49	1·31	2·60	2·02	0·77	1·57	1·24	1·37	1·87	1·88
		2nd ,,	2·30	1·77	1·88	1·56	0·16	1·31	1·24	0·71	1·13	2·11
	Average profit on working a coaching vehicle one mile—											
82	1st class . . . . *Pies*	1st half	0·87	*—4·00*	*—12·88*	0·04	*—9·40*	*—5·45*	*—9·43*	*—3·65*	*—4·35*	*—1·69*
		2nd ,,	4·39	*—1·12*	*—14·19*	*—6·06*	*—12·45*	*—6·90*	*—8·61*	*—6·61*	*—12·95*	0·56
83	2nd ,, ... ,,	1st half	4·70	*—2·39*	*—4·77*	*—0·81*	*—5·73*	2·28	*—5·81*	3·07	7·52	10·60
		2nd ,,	7·67	4·81	*—5·34*	*—3·52*	*—17·70*	5·44	*—3·46*	*—1·80*	*—2·03*	12·65
84	3rd or intermediate class . ,,	1st half	20·29	1·01	7·16	6·69		6·18	6·79	*26·44	38·96	
		2nd ,,	19·02	10·56	5·54	0·47	15·88	4·79	9·35	*15·79	37·16	28·09
85	4th or lowest class . . ,,	1st half	39·85	32·75	55·12	29·54	6·31	34·81	23·75	†29·65	31·08	26·09
		2nd ,,	35·20	37·45	44·20	25·84		30·16	21·50	†14·85	20·52	
86	Other vehicles . . . ,,	1st half	44·04	7·58	2·96	28·06	20·93	51·43	42·40	37·17	21·59	35·53
		2nd ,,	47·98	24·44	6·81	24·57	19·84	59·41	52·40	31·99	17·82	41·15

* Third class by
† Third class by
‡ Including Cawa

DIX 46—*contd.*

(*by systems*) *during each half-year of 1902*—contd.

prepared by the railways not shown.

3′ 3¾″												Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class : No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western, ‡	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
12,224	7,336	4,862	17,031	2,607	17,781	25,75	203	2,752	6,125	8,303	8,661	9,104	1st half	61
12,262	6,965	4,444	17,826	2,510	20,055	29,90	249	2,949	6,396	10,073	9,964	7,272	2nd ,,	
26,157	7,599	7,291	24,993	2,319	19,870	38,32	201	5,091	7,341	13,429	13,878	16,829	1st half	62
26,556	7,063	6,498	26,194	2,395	22,193	40,91	267	5,301	7,145	15,666	13,523	15,732	2nd ,,	
8,015	18,673	6,751	37,122	2,360	22,930	...	659	3,553	...	...	...	...	1st half	63
8,964	20,538	6,355	43,169	2,420	25,796	...	654	3,923	...	...	...	...	2nd ,,	
521,055	143,326	80,762	427,326	56,292	561,904	8,95,20	6,093	53,741	68,409	279,724	386,667	328,536	1st half	64
545,194	164,425	77,889	450,722	60,642	582,718	9,05,75	65,43	54,713	75,027	295,219	423,908	481,053	2nd ,,	
6,788	3,573	882	865	463	5,675	13,37	15	434	3,449	2,720	3,106	3,724	1st half	65
5,601	3,687	1,249	1,031	568	8,825	36,27	27	464	3,760	2,882	3,149	2,189	2nd ,,	
20·09	6·25	3·16	2·34	5·78	5·64	5·12	6·16	4·65	4·34	10·63	10·29	9·78	1st half	66
17·95	6·07	3·53	2·46	5·50	6·75	5·48	7·31	4·23	3·23	9·91	8·51	10·07	2nd ,,	
27·09	18·00	4·23	3·50	37·76	17·38	17·77	14·75	18·25	17·81	21·66	24·64	19·48	1st half	67
31·77	20·38	4·94	4·16	43·53	17·94	17·46	21·31	16·98	18·74	22·54	23·37	16·83	2nd ,,	
13·43	28·85	2·19	7·77	13·86	40·40	...	9·81	31·52	...	...	...	...	1st half	68
10·65	29·55	2·50	6·79	11·75	38·24	...	12·21	27·68	...	...	...	...	2nd ,,	
42·35	63·36	43·25	45·65	49·58	49·71	41·47	60·13	52·62	51·57	45·96	63·77	52·77	1st half	69
38·38	51·83	36·54	42·96	37·11	43·67	40·44	61·38	42·96	37·75	40·35	60·55	29·46	2nd ,,	
39·20	13·25	18·83	68·36	28·72	43·92	21·84	136·21	32·21	6·51	37·94	20·97	19·17	1st half	70
37·16	19·31	16·98	60·79	25·03	36·90	10·78	130·87	36·39	9·31	38·84	20·86	39·84	2nd ,,	
16,838	6,359	2,311	12,578	1,912	20,185	2,587	281	1,991	2,448	9,066	15,809	11,467	1st half	71
15,588	6,347	1,971	12,614	1,607	19,572	26,62	288	1,725	2,159	8,628	16,394	9,669	2nd ,,	
229,121	58,409	32,556	156,780	17,388	161,585	32,494	2,553	20,605	29,025	101,966	126,278	133,470	1st half	72
232,406	64,700	33,120	169,661	18,619	194,713	36,131	2,994	21,373	30,934	109,401	137,542	135,110	2nd ,,	
245,959	64,768	34,867	169,358	19,300	181,770	34,881	28·34	22,596	31,473	111,032	142,087	144,937	1st half	73
247,994	71,047	35,091	182,275	20,226	214,285	38,793	3,192	23,098	33,093	118,029	153,936	144,770	2nd ,,	
16·72	12·44	13·13	11·02	13·58	19·12	13·64	22·05	14·13	8·52	12·86	18·09	15·75	1st half	74
15·24	12·07	11·42	10·42	10·21	16·69	11·13	17·32	11·41	7·31	11·72	16·91	12·24	2nd ,,	
227·56	114·30	185·04	138·26	123·54	153·03	170·27	200·54	146·21	100·98	144·59	144·53	183·31	1st half	75
227·21	123·04	191·93	140·11	118·28	166·05	151·08	174·80	141·39	104·79	148·67	141·89	171·13	2nd ,,	
244·28	136·74	198·17	149·28	137·12	172·15	183·91	212·59	160·34	109·50	157·45	162·62	199·06	1st half	76
242·45	135·11	203·35	150·53	128·49	182·74	162·21	192·12	152·80	112·10	160·39	158·80	183·37	2nd ,,	
1·38	1·05	2·51	0·81	1·01	1·16	1·18	2·43	1·77	1·36	1·33	1·37	1·78	1st half	77
1·68	1·95	2·10	0·88	1·06	1·58	1·36	2·28	1·85	1·82	1·47	1·21	1·71	2nd ,,	
17·00	13·33	23·44	8·90	11·91	10·42	12·16	21·50	16·61	18·04	15·39	14·68	16·01	1st half	78
23·79	12·51	19·14	9·59	13·06	14·68	16·78	23·91	18·91	23·11	16·41	13·19	18·13	2nd ,,	
1·05	0·93	2·22	0·87	0·89	0·70	1·05	1·34	1·50	1·06	1·24	0·85	1·29	1st half	79
1·38	0·99	2·14	1·01	1·28	1·22	1·42	1·67	2·00	1·82	1·54	0·80	1·72	2nd ,,	
8·74	24·24	35·00	5·34	8·03	11·66	9·88	6·45	15·23	11·40	14·73	24·57	19·52	1st half	80
11·91	19·06	34·52	5·78	10·85	8·41	23·38	7·35	15·19	10·58	15·59	25·43	12·55	2nd ,,	
2·01	1·86	0·96*	1·17	1·99	2·28	1·36	1·56	1·76	1·61	1·18	1·96	2·47	1st half	81
1·44	1·74	0·92	0·99	1·29	1·47	0·73	0·88	1·02	0·53	0·87	1·95	1·50	2nd ,,	
4·84	*—4·24*	*—15·96*	*—6·05*	5·66	*—2·52*	*—6·14*	*—8·31*	*—11·70*	*—9·62*	*—5·70*	*—3·99*	*—5·01*	1st half	82
—3·51	*—3·33*	*—11·57*	*—6·33*	5·02	*—5·16*	*—9·24*	*—7·44*	*—13·92*	16·61	*—6·56*	*—3·76*	*—7·55*	2nd ,,	
6·64	0·13	*—14·99*	*—5·69*	22·88	2·29	1·12	*—5·78*	*—4·41*	0·38	*—1·63*	0·08	0·10	1st half	83
—0·35	2·25	*—11·06*	*—6·11*	23·19	*—0·80*	*—3·70*	*—1·15*	*—7·04*	4·25	*—2·24*	1·55	*—3·30*	2nd ,,	
2·48	2·62	*—20·82*	*—3·71*	0·25	19·80	...	*—14·44*	0·54	...	...	...	...	1st half	84
—8·45	3·71	*—16·18*	*—4·68*	*—3·09*	13·96	...	*—15·12*	*—3·96*	...	...	...	...	2nd ,,	
38·28	35·85	22·59	17·95	24·19	21·89	17·52	18·05	27·00	28·41	15·58	25·49	29·63	1st half	85
25·30	28·04	20·13	15·03	14·08	13·85	10·43	11·24	18·12	10·72	10·93	26·02	20·30	2nd ,,	
43·45	25·30	3·11	71·63	83·81	65·69	18·81	128·78	42·90	57·28	34·52	13·76	14·11	1st half	86
42·14	29·41	4·15	63·39	74·19	51·23	31·66	104·34	48·49	27·12	34·16	11·87	30·80	2nd ,,	

mail trains.
other than mail trains.
pore-Burhwal link.

P. T. O.

Appendix 46.
Analysis.

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central	Bengal-Nagpur	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	COACHING TRAFFIC—*concld.*											
	COST OF WORKING AND PROFIT—*concld.*											
	Average profit on working a coaching unit one mile—											
87	Per passenger unit . . *Pies*	1st half	1·86	1·22	1·91	1·50	1·05	1·49	1·06	1·22	1·27	1·31
		2nd „	1·83	1·66	1·66	1·28	0·30	1·38	1·04	0·66	0·83	1·41
88	Other traffic per ton . . „	1st half	22·98	11·06	17·05	27·61	24·66	33·25	22·95	23·65	16·88	24·67
		2nd „	23·39	28·23	19·33	22·53	18·01	31·70	23·62	21·37	12·65	25·46
	GOODS TRAFFIC.											
	GROSS RECEIPTS AND TRAIN MILEAGE— (*In thousands.*)											
89	Receipts from goods traffic . ₹	1st half	2,58,34	24,51	1,20	45,36	20	36,00	1,56,21	2,44,20	68,14	18,89
		2nd „	2,15,41	40,20	3,06	3,162	9	28,75	1,34,91	1,41,82	4,573	16,46
90	Goods train miles run . . No.	1st half	5,511	502	65	1,282	14	10,83	3,764	4,902	651	357
		2nd „	4,902	571	99	1,947	12	8,94	3,296	3,332	466	357
91	Average goods receipts per train-mile . . . ₹	1st half	4·69	4·88	2·83	3·54	1·39	3·32	4·35	4·98	10·46	5·29
		2nd „	4·39	7·04	3·10	3·02	0·76	3·22	4·09	4·26	9·81	4·61
	UNITS AND UNIT-MILEAGE. (*In thousands*)											
92	Tons of goods carried one mile	1st half	1,114,592	66,905	3,385	172,309	508	127,712	564,515	846,785	163,279	61,028
		2nd „	925,880	90,914	7,531	133,706	287	136,786	506,994	415,343	111,674	53,252
93	Average sum received for carrying a ton one mile . *Pies.*	1st half	4·45	7·03	6·28	5·05	7·44	5·41	5·31	5·54	8·01	5·94
		2nd „	8·47	8·57	7·80	4·34	6·26	4·73	5·14	6·56	7·86	5·93
94	Average number of tons in a train . . . . *Tons.*	1st half	202·24	133·33	51·92	134·41	35·88	117·89	149·98	172·76	250·69	130·83
		2nd „	188·89	152·60	36·27	127·75	23·80	130·38	153·80	124·67	239·55	118·37
	VEHICLES AND VEHICLE-MILEAGE— Number of goods vehicles hauled one mile— (*In thousands*)											
95	Loaded . . . *Vehicle-miles*	1st half	108,558	8,693	624	22,305	106	20,175	69,745	94,309	19,733	5,554
		2nd „	98,268	14,707	1,347	16,954	58	17,061	60,445	63,767	13,836	5,048
96	Empty . . . . „	1st half	52,211	3,134	214	9,923	49	6,793	24,615	39,416	4,985	3,782
		2nd „	46,315	5,122	957	8,990	29	5,917	23,697	20,279	4,046	3,448
97	Brake vans . . . „	1st half	5,035	515	54	2,413	23	1,249	4,237	9,438	495	658
		2nd „	4,863	579	98	2,114	17	989	3,834	6,446	334	605
98	Total . . . . „	1st half	165,804	12,342	892	34,641	178	28,217	98,597	143,163	25,213	9,994
		2nd „	149,446	20,708	2,402	28,058	104	23,967	87,977	90,492	18,216	9,101
	Average number of vehicles in a goods train—											
99	Freight vehicles . . *No.*	1st half	29·17	23·57	12·86	25·14	10·95	25·90	25·07	27 28	37·95	20·01
		2nd „	29·50	35·24	23·33	24·79	7·22	25·69	25·53	25 23	38·36	18·88
100	Brake-vans . . . . „	1st half	0·91	1·02	0·82	1·88	1·60	1·15	1·13	1·93	0·76	1·41
		2nd „	0·99	1·01	1 00	2·02	1·43	1·16	1·16	1·93	0·71	1·35
101	Total . . . . . „	1st half	30·08	24·59	13·68	27·02	12·55	26·05	26·20	29·21	38·71	21·42
		2nd „	30·49	36·25	24·33	26·81	8·65	26·80	26·69	27·16	39·07	20·23
102	Average earnings per goods vehicle per mile (excluding brakes) . . . *Pies.*	1st half	30·85	39·79	27·37	27·02	24·38	25·63	31·79	35·06	52·92	38·85
		2nd „	28·61	38·34	25·49	23·31	20·45	24·03	30·78	32·40	49·10	37·20
103	Carrying capacity hauled one mile (excluding brakes) *Tons*	1st half	2,304,726	140,402	12,177	479,603	827	315,939	1,240,011	1,874,582	320,751	123,109
		2nd „	2,099,713	237,786	31,769	388,840	493	288,513	1,144,643	1,151,823	232,171	134,107
104	Percentage of freight upon capacity hauled . *Per cent.*	1st half	48·36	47 65	27·80	35·92	61·38	40·42	45·53	45·17	50·91	49·57
		2nd „	44·10	37·86	23·71	34·39	58·25	40·48	44·21	36·06	48·10	46·67
105	Average load of a goods vehicle (including both loaded and empty) . . *Tons.*	1st half	6·93	5·66	4·04	5·35	3·27	4·74	5·98	6·33	6·61	6·54
		2nd „	6·40	4·47	3·26	5·15	3·30	5·08	6·03	4·94	6·24	6·27
106	Average load of a loaded goods vehicle . . . . „	1st half	10·27	7·70	5 43	7·72	4·79	6·33	8·09	8·98	8·27	10·99
		2nd „	9·42	6·12	5 59	7·89	4·97	6·85	8·39	6·51	8·07	10·55
	WEIGHT OF TRAIN AND TON-MILEAGE— Gross ton-mileage of all goods trains— (*In thousands.*)											
107	Freight . . . . *Tons*	1st half	1,114,592	66,905	3,385	172,309	508	127,712	564,515	846,785	163,280	61,028
		2nd „	925,880	90,014	7,531	133,706	287	136,786	506,994	415,343	111,074	53,252
108	Dead weight . . . . „	1st half	1,529,210	122,080	10,879	329,776	604	279,164	954,299	1,349,830	207,888	97,796
		2nd „	1,364,294	187,902	23,498	268,173	490	233,438	850,069	883,529	149,345	91,953
109	Total . . . . . „	1st half	2,643,802	188,985	14,264	502,085	1,112	406,876	1,518,814	2,196,615	371,168	158,824
		2nd „	2,290,174	277,916	31,029	401,882	777	350,224	1,357,063	1,298,872	261,019	145,205

* Excluding Cawnpore

DIX 46—*contd.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3⅜″											GAUGE.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*).	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. *	Rohilkund and Kumaon	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
1·41	1·72	0·88	1·18	1·60	1·42	1·11	0·76	1·42	1·08	0·98	1·25	1·87	1st half	87
1·03	1·65	0·98	1·05	1·30	0·94	0·77	0·50	0·91	0·34	0·73	1·33	1·44	2nd „	
22·97	32·08	7·14	38·12	54·25	19·18	26·08	21·13	32·50	39·31	29·95	23·88	18·93	1st half	88
26·42	30·55	9·21	33·00	54·80	23·30	12·12	17·15	32·07	19·46	29·13	23·98	20·28	2nd „	
51,48	19,11	3,28	34,02	6,07	1,08,44	9,03	71	4,58	8,19	29,22	25,45	38,85	1st half	8
43,29	23,99	4,68	18,82	3,69	69,68	5,50	41	2,50	4,57	25,33	23,39	27,98	2nd „	
1,293	591	151	1,664	187	2,474	296	13	119	264	1,083	840	1,157	1st half	9
1,277	624	259	838	150	1,724	224	10	77	217	1,056	856	1,060	2nd „	
3·98	3·23	2·17	3·20	3·24	4·38	3·05	3·54	3·85	3·10	2·70	3·03	3·36	1st half	9
3·39	3·85	1·80	2·24	2·47	4·04	2·45	4·17	3·24	2·11	2·40	2·73	2·64	2nd „	
165,209	46,017	11,404	106,414	16,872	322,822	2,16,83	976	7,872	16,495	82,031	63,809	99,561	1st half	9
126,275	48,030	16,957	65,705	11,757	208,855	1,55,88	581	4,327	10,421	73,932	60,768	80,692	2nd „	
5·98	7·98	5·52	6·14	6·91	6·45	7·99	14·00	11·18	9·53	6·84	7·66	7·56	1st half	9
6·58	9·59	5·30	3·50	6·03	6·41	6·77	13·59	11·10	8·42	6·58	7·39	6·66	2nd „	
127·73	77·80	75·50	100·05	90·17	130·49	73·21	76·11	66·13	39·24	75·77	76·01	86·04	1st half	9
98·92	77·02	65·36	78·37	78·63	121·12	69·55	58·94	56·09	27·67	77·01	70·96	76·16	2nd „	
22,412	12,724	2,252	19,920	2,925	57,072	4,598	184	2,196	3,269	18,728	12,953	20,457	1st half	9
19,663	14,061	3,240	13,884	2,191	39,183	2,954	132	1,386	2,563	17,092	12,248	17,118	2nd „	
8,102	2,468	1,016	7,292	1,565	23,029	2,405	143	1,113	1,388	5,379	4,120	8,755	1st half	9
6,758	4,299	1,951	6,011	1,245	19,929	1,421	92	689	1,191	5,991	4,082	7,607	2nd „	
2,097	604	219	1,259	257	2,336	98	...	69	459	1,457	528	1,297	1st half	9
2,024	615	254	1,207	195	1,418	37	...	36	418	1,465	556	1,103	2nd „	
32,011	15,796	3,487	28,471	4,747	82,437	7,101	327	3,378	5,116	25,564	17,601	30,509	1st half	9
28,445	18,975	5,445	21,072	3,631	53,530	4,412	224	2,111	4,172	24,548	16,886	25,888	2nd „	
23·59	25·70	21·64	25·58	24·00	32·38	23·65	25·50	27·80	11·08	22·27	20·33	25·25	1st half	9
20·70	29·44	20·01	23·69	22·97	30·22	19·52	22·77	26·90	9·96	21·86	19·07	23·34	2nd „	
1·62	1·02	1·45	1·18	1·37	0·94	0·33	...	0·58	1·09	1·34	0·63	1·12	1st half	10
1·58	0·99	0·98	1·44	1·31	0·82	0·17	...	0·47	1·11	1·39	0·63	1·10	2nd „	
25·21	26·72	23·09	26·76	25·37	33·32	23·98	25·50	28·38	12·17	23·61	20·96	26·37	1st half	10
22·28	36·43	20·99	25·13	24·28	31·04	19·69	22·77	27·37	11·07	23·25	19·72	24·44	2nd „	
32·39	24·16	19·24	24·60	25·95	25·90	24·76	41·38	26·60	33·76	23·27	28·62	25·53	1st half	10
31·46	25·09	17·32	18·19	20·64	25·67	24·12	35·19	23·15	23·37	21·07	27·50	21·63	2nd „	
403,814	105,142	30,982	223,063	38,132	676,297	64,857	2,667	19,863	42,417	166,858	109,982	269,141	1st half	10
347,631	129,047	47,664	163,523	32,627	442,317	38,508	1,811	12,427	34,713	161,429	111,108	186,619	2nd „	
40·91	43·77	36·81	42·51	44·25	49·73	33·43	36·58	39·63	38·89	49·16	58·02	47·60	1st half	10
36·32	37·22	35·58	40·18	36·04	47·22	40·42	32·06	34·82	30·02	45·80	54·69	43·24	2nd „	
5·41	3·03	3·49	3·91	3·76	4·03	3·16	2·98	2·38	3·54	3·40	3·74	3·41	1st half	10
4·78	2·62	3·27	3·31	3·42	4·01	3·56	2·59	2·09	2·78	3·20	3·72	3·26	2nd „	
7·37	3·62	5·06	5·34	5·77	5·66	4·72	5·30	3·58	5·05	4·38	4·93	4·87	1st half	10
6·42	3·42	5·23	4·74	5·37	5·33	5·28	4·40	3·12	4·07	4·33	4·96	4·71	2nd „	
165,209	46,016	11,404	106,414	16,872	322,822	21,683	976	7,872	16,495	82,032	63,809	99,561	1st half	97
126,275	48,030	16,957	65,705	11,757	208,855	15,588	581	4,327	10,421	73,932	60,768	80,692	2nd „	
317,786	81,462	18,876	140,797	21,793	381,742	36,571	1,635	15,539	30,603	135,388	97,531	158,016	1st half	08
287,411	96,256	30,455	106,373	17,616	243,160	25,190	1,201	9,799	25,211	130,283	95,989	138,798	2nd „	
482,995	127,478	30,280	247,211	38,665	704,564	58,254	2,611	23,411	47,098	217,420	161,340	257,577	1st half	109
413,686	144,286	47,412	172,078	29,373	452,015	40,778	1,782	14,126	35,632	204,215	156,757	219,490	2nd „	

Burhwal link.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		CLASS: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State
	GOODS TRAFFIC—*concld.*											
	WEIGHT OF TRAIN AND TON-MILEAGE—*concld.*											
	Average weight of a goods train—											
110	Freight . . . . . Tons	1st half	202·24	133·33	51·92	134·41	35·88	117·90	149·98	172·76	250·69	130·83
		2nd ,,	188·89	157·00	76·27	127·75	23·80	130·58	153·80	124·67	239·55	118·37
111	Dead-weight	1st half	277·48	243·27	166·88	257·24	42·65	257·70	253·53	275·39	319·19	209·64
		2nd ,,	278·32	328·97	237·98	256·22	40·60	261·60	257·87	265·19	320·36	204·40
112	Total	1st half	479·72	376·60	218·80	391·65	78·53	375·60	403·51	448·15	569·88	340·47
		2nd ,,	467·21	486·57	314·25	383·97	64·40	391·58	411·67	389·86	559·91	322·77
	COST OF WORKING AND PROFIT.											
113	Average cost of hauling a goods train one mile . . R	1st half	1·75	2·86	1·49	1·73	0·05	1·74	2·43	2·06	3·99	2·10
		2nd ,,	1·77	2·39	2·07	2·00	1·10	1·79	2·51	2·46	4·91	1·64
114	Average cost of hauling a goods vehicle with its load one mile . . . . *Pies*	1st half	11·50	23·30	22·18	13·24	26·68	13·38	18·61	14·50	20·10	15·40
		2nd ,,	11·53	13·04	17·07	15·50	29·28	13·41	15·90	18·72	24·57	13·26
115	Average cost of hauling a goods unit (*viz.*, one ton) one mile . . . . ,,	1st half	1·66	4·12	5·49	2·48	5·09	2·83	3·11	2·29	3·05	2·36
		2nd ,,	1·80	2·92	5·22	3·01	8·88	2·64	3·14	3·79	3·93	2·12
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum . . . . . ,,	1st half	3·28	7·20	11·01	6·36	13·07	5·88	6·32	4·17	5·93	5·07
		2nd ,,	3·69	5·52	8·78	2·68	21·22	5·80	6·57	2·01	7·93	5·19
116	Average profit on working a goods train one mile . R	1st half	2·94	2·02	0·34	1·81	0·44	1·88	1·72	9·92	6·47	3·19
		2nd ,,	2·62	4·65	1·01	1·62	—0·34	1·43	1·50	1·80	4·90	2·97
117	Average profit on working a goods vehicle with its load one mile . . . *Pies*	1st half	19·35	16·49	5·19	13·78	7·70	12·25	13·18	20·56	32·73	23·45
		2nd ,,	17·93	25·30	8·42	7·81	—8·83	10·02	11·83	13·68	24·53	23·94
118	Average profit on working a goods unit (*viz.*, one ton) one mile . . . . ,,	1st half	2·79	2·02	1·29	2·57	2·35	2·58	2·20	3·25	4·95	3·58
		2nd ,,	2·67	5·65	2·58	1·53	—2·68	2·09	1·97	2·77	3·93	3·81
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.											
	Percentage on Total Earnings—											
119	Coaching traffic . . . *Per cent*	1st half	29·08	37·41	63·68	38·23	46·02	40·72	32·18	32·42	30·89	20·53
		2nd ,,	33·48	27·95	55·07	45·65	57·67	44·98	36·71	32·88	37·75	20·45
120	Goods traffic . . . . ,,	1st half	69·45	55·21	19·35	58·11	51·21	49·50	66·36	76·79	66·62	77·77
		2nd ,,	64·82	67·63	43·72	49·79	38·16	46·78	61·81	66·02	59·87	72·62
121	Sundries, including telegraph . . . . . ,,	1st half	1·18	7·38	16·97	3·64	2·77	9·78	1·45	0·79	2·49	1·70
		2nd ,,	1·37	4·42	1·21	4·40	4·17	8·24	1·46	1·10	2·58	6·93
122	Steam-boat earnings . . ,,	1st half	0·32	...	...	0·02	...	...	0·01	...	...	...
		2nd ,,	0·33	...	...	0·16	...	...	0·02	...	...	...
	Total . . ,,	1st half	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
		2nd ,,	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
	Percentage of Working Expenses on Total Earnings—											
123	Maintenance . . . *Per cent*	1st half	9·80	14·58	15·03	9·71	25·28	11·57	16·93	6·74	9·72	7·83
		2nd ,,	10·45	8·02	8·66	14·22	47·02	14·81	13·09	10·53	11·85	11·73
124	Locomotive expenses . . ,,	1st half	10·63	19·11	11·12	14·12	16·67	14·09	19·55	19·46	16·07	16·27
		2nd ,,	11·57	10·09	10·89	17·32	26·44	15·80	22·24	25·63	18·94	12·16
125	Carriage and wagon expenses . . . . . ,,	1st half	3·03	4·83	3·30	3·48	3·26	9·64	8·13	4·26	5·90	3·44
		2nd ,,	1·96	2·83	3·93	3·77	6·42	5·29	9·59	6·99	10·81	2·63
126	Traffic expenses . . . ,,	1st half	6·93	13·72	11·28	8·34	6·22	8·88	7·75	6·57	5·96	5·44
		2nd ,,	7·57	11·31	11·71	10·12	9·57	9·49	8·56	9·93	7·85	5·96
127	General charges . . . ,,	1st half	3·14	5·33	13·08	6·51	7·86	4·04	3·55	3·34	3·75	4·48
		2nd ,,	3·77	3·52	11·75	8·41	13·93	4·67	3·56	4·96	5·04	5·26
128	Miscellaneous expenses . ,,	1st half	1·84	3·69	4·24	3·17	0·73	2·24	1·58	2·43	1·24	2·36
		2nd ,,	2·42	2·64	8·06	3·14	1·10	2·19	1·90	3·15	2·18	2·22
129	Steam-boat expenses . ,,	1st half	0·23	...	...	0·42	...	...	0·03	...	...	...
		2nd ,,	0·28	...	...	0·62	...	...	0·04	...	...	...
130	TOTAL WORKING EXPENSES ,,	1st half	35·60	61·26	58·05	45·75	60·02	50·46	57·52	42·80	42·64	39·82
		2nd ,,	38·02	38·41	55·00	57·65	104·53	52·25	58·98	61·19	56·67	39·96

* Including Cawnpore.

DIX 46—*contd.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3' 3⅜"											GAUGE.	
1 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. *	Rohilkund and Kumaon	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar Gondal Junagad-Porbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half years.	
127·73	77·86	75·50	100·05	90·17	130·49	73·21	76·12	66·14	39·24	75·77	76·01	86·04	1st half	110
98·92	77·02	65·36	70·37	78·63	121·12	69·55	58·95	56·09	27·67	70·01	70·96	76·16	2nd „	
245·70	137·82	124·96	132·37	116·46	154·30	123·48	127·49	130·53	72·80	125·06	116·17	136·55	1st half	111
225·15	154·36	117·38	126·83	117·81	141·02	112·39	121·91	127·02	66·93	123·38	112·10	131·00	2nd „	
373·43	215·68	200·46	232·42	206·63	284·79	196·69	203·61	196·67	112·04	200·83	192·18	222·59	1st half	112
324·07	231·38	182·74	205·25	196·44	262·14	181·94	180·86	183·11	94·60	193·39	183·06	207·16	2nd „	
2·12	1·79	2·54	1·27	1·52	1·92	1·25	2·22	2·17	1·22	1·70	1·62	1·94	1st half	113
2·24	1·80	1·89	1·20	1·63	2·27	1·52	2·14	2·21	1·50	1·77	1·39	1·94	2nd „	
17·23	13·36	22·51	9·50	12·18	11·39	10·42	16·77	14·97	13·34	14·62	15·31	14·78	1st half	114
20·81	11·71	18·09	9·75	13·55	14·41	14·96	18·06	15·81	16·70	15·54	14·04	15·94	2nd „	
3·18	4·41	6·45	2·43	3·24	2·83	3·28	5·62	6·29	3·77	4·30	4·19	4·34	1st half	115
4·35	4·48	5·54	2·95	3·97	3·59	4·20	6·97	7·58	6·01	4·85	3·77	4·88	2nd „	
6·89	8·55	14·91	5·05	5·63	4·53	5·93	15·78	13·30	8·13	9·27	7·32	7·75	1st half	115 A
9·01	8·94	12·66	6·51	7·20	5·86	7·54	24·05	17·10	12·17	10·70	7·25	8·91	2nd „	
1·86	1·44	—0·37	1·93	1·72	2·46	1·80	3·33	1·68	1·88	1·90	1·41	1·42	1st half	116
1·15	2·05	—0·09	1·04	0·84	1·77	0·93	2·03	1·03	0·61	0·63	1·34	0·70	2nd „	
15·16	10·80	—3·27	14·50	13·77	14·60	13·59	25·01	11·63	20·42	8·65	13·31	10·75	1st half	117
10·65	13·38	—0·77	8·44	7·06	11·26	9·16	17·13	7·34	6·67	5·33	13·49	5·74	2nd „	
2·80	3·57	—0·93	3·71	3·67	3·62	4·71	8·38	4·89	5·76	2·54	3·56	3·16	1st half	118
2·23	5·11	—0·24	2·55	2·06	2·82	2·57	6·62	3·52	2·41	1·73	3·62	1·78	2nd „	
38·54	40·08	60·38	37·41	39·48	24·76	33·96	41·09	51·21	33·88	36·98	53·10	43·39	1st half	119
41·17	34·57	48·02	49·87	46·73	33·05	46·21	55·57	61·93	43·54	39·80	55·32	46·63	2nd „	
58·10	51·45	32·42	51·93	56·67	73·86	63·60	58·15	47·15	58·91	61·14	46·46	54·97	1st half	120
55·88	56·58	43·13	38·83	46·57	64·44	50·79	43·55	35·75	50·86	58·63	42·28	51·47	2nd „	
3·36	0·97	6·32	4·02	3·85	1·38	2·44	0·76	1·64	7·21	1·88	0·44	1·41	1st half	121
2·95	1·19	8·10	4·82	6·70	2·51	3·00	0·88	2·32	5·60	1·57	2·40	1·61	2nd „	
...	7·50	0·88	6·64	...	...	...	...	...	...	...	...	0·23	1st half	122
...	7·66	0·75	6·48	...	...	...	...	...	...	...	...	0·29	2nd „	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	1st half	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	2nd „	
8·99	12·64	28·22	11·07	10·78	9·72	8·82	12·40	13·18	15·65	13·14	10·92	12·53	1st half	123
14·37	12·43	23·23	13·82	15·06	11·81	20·28	16·50	16·74	24·37	16·73	8·26	15·01	2nd „	
20·76	11·63	17·08	9·86	11·04	16·07	10·57	14·53	15·60	12·48	20·71	16·19	19·62	1st half	124
24·01	10·17	19·78	12·64	12·83	18·88	22·75	17·19	18·13	20·10	24·71	16·30	24·46	2nd „	
4·92	4·13	4·96	2·28	4·00	4·73	2·95	4·92	2·99	1·45	5·82	5·34	4·17	1st half	125
5·36	4·22	4·77	2·86	3·85	9·20	4·46	9·17	2·69	1·96	6·22	4·92	5·78	2nd „	
7·29	8·78	14·44	7·33	7·02	5·96	6·08	8·48	10·10	7·17	9·29	7·01	7·96	1st half	126
8·43	7·73	14·05	10·25	10·34	7·89	7·22	10·23	13·56	12·25	10·46	7·50	10·44	2nd „	
4·69	4·32	20·82	4·90	7·00	3·75	3·79	6·80	10·32	8·33	8·01	6·49	5·65	1st half	127
6·44	3·83	19·43	6·62	10·59	5·03	5·59	7·08	14·20	14·81	9·93	6·41	7·28	2nd „	
2·59	1·87	2·38	3·09	0·74	1·72	2·63	2·08	1·61	0·98	1·55	1·12	1·19	1st half	128
2·35	2·22	5·27	2·90	1·04	2·10	2·82	2·30	1·32	2·21	1·74	1·20	1·31	2nd „	
...	7·49	0·61	2·82	...	...	...	...	...	...	...	...	1·13	1st half	129
...	7·37	0·73	3·16	...	...	...	...	...	...	...	...	0·81	2nd „	
49·24	51·36	88·51	41·35	40·58	41·95	43·84	49·21	53·80	46·06	56·42	47·07	52·25	1st half	130
60·96	47·97	87·26	52·25	54·71	54·91	63·12	63·27	66·64	75·70	69·79	44·59	65·09	2nd „	

Burhwal link.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*).
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Rajpur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	PER MILE OF LINE MAINTAINED.								TABLE A.—MAINTENANCE OF			
131 *a*	General superintendence (including office expenses) . . Rs.	1st half	208·99	272·47	103·77	113·90	13·60	137·69	126·60	130·79	159·10	126·36
		2nd „	207·98	235·60	103·01	108·39	9·59	146·10	129·74	127·49	160·13	127·59
132 *a*	Maintenance and renewal of permanent-way . . . „	1st half	906·38	1,349·97	503·84	220·98	117·36	282·78	625·10	422·64	724·15	358·41
		2nd „	705·37	808·70	291·44	274·23	111·49	396·89	335·37	394·28	663·56	346·92
133 *a*	Repairs of bridges, &c. . . „	1st half	93·36	290·29	32·84	84·12	5·96	114·23	75·02	94·71	98·10	45·74
		2nd „	154·10	178·71	14·28	89·88	23·61	113·24	81·76	128·55	87·61	120·14
134 *a*	Conservancy of rivers . . „	1st half	...	18·38	0·77	...	...	3·14	8·71	...	...	0·19
		2nd „	...	0·70	3·61	...	...	6·63	21·25	...	...	0·11
135 *a*	Repairs of stations and buildings „	1st half	360·58	373·25	82·33	47·79	8·45	129·20	123·15	96·86	153·63	48·81
		2nd „	400·06	357·60	65·73	54·76	14·95	61·93	81·54	122·59	121·99	53·17
136 *a*	Other charges (net) . . „	1st half	147·18	76·83	19·06	21·96	27·42	75·19	119·52	56·52	71·04	—37·21
		2nd „	128·35	143·73	6·52	50·57	43·56	75·86	122·93	74·15	67·77	110·03
137 *a*	Total maintenance, &c. . „	1st half	1,716·49	2,381·19	742·61	488·75	172·79	742·23	1,078·10	801·52	1,206·02	544·32
		2nd „	1,595·86	1,725·04	484·59	577·83	203·20	802·65	772·59	847·06	1,101·06	757·96
	PER MILE OF TRACK, INCLUDING SIDINGS.											
131 *b*	General superintendence (including office expenses) . . Rs.	1st half	137·05	143·70	86·10	100·66	12·79	120·49	100·44	97·59	109·34	112·98
		2nd „	136·04	125·50	85·48	95·89	9·01	129·32	102·80	95·03	107·84	113·68
132 *b*	Maintenance and renewal of permanent-way . . . „	1st half	594·36	711·97	418·09	195·30	110·33	247·46	495·97	315·36	497·69	320·48
		2nd „	461·39	430·79	241·84	242·60	104·81	346·56	265·71	293·90	446·88	309·18
133 *b*	Repairs of bridges, &c. . . „	1st half	61·22	153·10	27·25	74·34	5·66	99·96	59·53	70·66	67·42	40·90
		2nd „	100·80	95·20	11·86	79·51	22·20	98·88	64·78	95·82	59·00	107·08
134 *b*	Conservancy of rivers . . „	1st half	...	9·70	0·64	...	...	2·75	6·91	...	...	0·17
		2nd „	...	0·37	2·99	...	...	5·79	16·84	...	...	0·10
135 *b*	Repairs of stations and buildings „	1st half	236·45	196·85	68·32	42·24	7·94	113·06	97·71	72·28	105·59	43·66
		2nd „	261·68	190·30	54·54	48·44	14·06	54·07	64·60	91·38	82·45	47·39
136 *b*	Other charges (net) . . „	1st half	96·51	40·51	15·82	19·41	25·78	65·80	94·83	42·17	48·83	—33·26
		2nd „	83·95	76·57	5·41	44·74	40·95	66·24	97·40	55·28	45·63	98·07
137 *b*	Total maintenance, &c. . . „	1st half	1,125·59	1,255·83	616·22	431·95	162·44	649·52	855·39	598·06	828·87	484·93
		2nd „	1,043·86	918·93	402·12	511·18	191·03	700·86	612·13	631·41	741·50	675·50
	PER TOTAL TRAIN-MILE.											
131 *c*	General superintendence (including office expenses) . . As.	1st half	0·82	1·14	1·33	1·29	0·47	1·13	1·13	0·72	1·39	1·38
		2nd „	0·88	0·91	0·97	1·33	0·32	1·30	1·22	0·82	1·57	1·44
132 *c*	Maintenance and renewal of permanent-way . . „	1st half	3·58	5·66	6·45	2·49	4·05	2·32	5·60	2·34	6·33	3·91
		2nd „	2·97	3·14	2·75	3·36	3·70	3·47	3·15	2·54	6·51	3·92
133 *c*	Repairs of bridges, &c. . „	1st half	0·37	1·22	0·42	0·95	0·21	0·94	0·67	0·53	0·86	0·50
		2nd „	0·65	0·69	0·14	1·10	0·78	0·99	0·77	0·83	0·86	1·36
134 *c*	Conservancy of rivers . . „	1st half	...	0·08	0·01	...	...	0·02	0·08	...	...	...
		2nd „	...	...	0·03	...	...	0·07	0·20	...	...	...
135 *c*	Repairs of stations and buildings „	1st half	1·42	1·57	1·05	0·54	0·29	1·06	1·10	0·54	1·34	0·53
		2nd „	1·69	1·39	0·62	0·67	0·49	0·54	0·76	0·79	1·20	0·60
136 *c*	Other charges (net) . . „	1st half	0·58	0·32	0·25	...	0·94	0·62	1·07	0·31	0·62	—0·40
		2nd „	0·54	0·56	0·06	0·62	1·45	0·66	1·16	0·48	0·66	1·25
137 *c*	Total maintenance, &c. . . „	1st half	6·77	9·99	9·51	5·52	5·96	6·09	9·65	4·44	10·54	5·92
		2nd „	6·73	6·69	4·57	7·08	6·74	7·03	7·26	5·46	10·80	8·57
	PER 1,000 GROSS TON-MILES.											
131 *d*	General superintendence (including office expenses) . . Rs.	1st half	0·13	0·24	0·35	0·24	0·42	0·23	0·21	0·12	0·22	0·22
		2nd „	0·14	0·16	0·23	0·26	0·37	0·27	0·23	0·17	0·27	0·25
132 *d*	Maintenance and renewal of permanent-way . . „	1st half	0·55	1·16	1·69	0·45	3·63	0·48	1·05	0·39	1·00	0·62
		2nd „	0·48	0·54	0·64	0·65	4·30	0·73	0·60	0·51	1·14	0·65
133 *d*	Repairs of bridges, &c. . „	1st half	0·06	0·25	0·11	0·17	0·18	0·19	0·13	0·09	0·14	0·08
		2nd „	0·10	0·12	0·03	0·21	0·91	0·20	0·15	0·17	0·15	0·22
134 *d*	Conservancy of rivers . . „	1st half	...	0·02	...	...	...	0·01	0·02	...	...	...
		2nd „	...	...	0·01	...	...	0·01	0·04	...	...	...
135 *d*	Repairs of stations and buildings „	1st half	0·22	0·32	0·27	0·10	0·26	0·22	0·21	0·09	0·21	0·09
		2nd „	0·27	0·24	0·14	0·13	0·57	0·12	0·15	0·16	0·21	0·10
136 *d*	Other charges (net) . . „	1st half	0·08	0·06	0·06	...	0·85	0·13	0·20	0·05	0·10	—0·07
		2nd „	0·09	0·10	0·01	0·12	1·61	0·14	0·22	0·10	0·12	0·20
137 *d*	Total maintenance, &c. . „	1st half	1·04	2·05	2·48	1·00	5·34	1·26	1·82	0·74	1·67	0·94
		2nd „	1·08	1·16	1·06	1·37	7·83	1·47	1·39	1·11	1·89	1·42

* Excluding Cawnpore-Burhwal link

DIX 46—*contd.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3⅜″											GAUGE.	
10 (*a*) to (*c*)	12 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	18 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. *	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	Serial number.
WAY, WORKS AND STATIONS.														
140·72	101·75	128·23	87·05	62·08	103·93	20·46	49·10	66·04	133·50	78·83	124·53	115·88	1st half	131*a*
137·28	108·71	126·23	87·54	72·69	100·88	20·30	48·66	63·15	116·90	84·19	102·07	109·50	2nd ,,	
295·39	386·86	220·95	225·30	191·80	473·06	98·74	134·63	191·09	232·54	236·70	352·11	407·75	1st half	132*a*
361·36	338·12	199·63	221·47	220·38	417·98	213·48	160·01	157·78	219·75	264·43	187·34	338·58	2nd ,,	
—25·77	40·26	62·99	47·25	84·30	64·08	23·04	1·88	5·55	71·16	23·39	13·05	101·94	1st half	133*a*
156·23	90·65	45·94	65·62	81·70	55·19	12·06	5·43	5·08	59·46	27·06	13·91	25·03	2nd ,,	
...	0·11	...	11·98	15·25	...	...	...	...	...	...	...	4·37	1st half	134*a*
...	0·19	...	5·72	4·81	...	...	...	...	...	...	...	3·47	2nd ,,	
72·32	78·02	50·10	42·36	37·09	100·35	37·44	15·61	9·78	32·09	28·42	56·06	72·81	1st half	135*a*
64·64	101·33	33·94	44·32	38·57	76·84	17·75	12·43	19·04	65·90	35·22	59·25	103·84	2nd ,,	
107·87	61·55	21·66	98·22	25·10	46·41	10·42	25·27	14·59	86·66	27·18	—15·96	48·88	1st half	136*a*
104·21	93·56	22·21	42·78	50·15	42·69	13·24	4·98	17·57	97·21	28·90	7·06	57·71	2nd ,,	
506·53	668·55	483·93	512·19	415·62	787·83	170·10	226·49	287·05	555·86	394·52	529·79	751·63	1st half	137*a*
823·72	732·56	427·95	497·45	468·90	693·58	227·43	231·51	262·62	559·28	439·80	369·63	688·13	2nd ,,	
116·47	87·18	112·43	75·79	55·22	89·68	19·66	46·06	59·91	122·54	71·30	110·89	100·16	1st half	131*b*
143·85	93·06	110·87	76·01	64·76	86·93	19·49	45·64	57·49	105·30	75·85	91·27	94·52	2nd ,,	
244·49	331·47	193·71	196·15	170·55	408·15	94·88	126·27	173·35	213·45	214·07	313·56	352·44	1st half	132*b*
299·67	289·44	175·34	192·28	196·35	360·17	204·97	150·88	143·65	197·96	238·23	162·53	292·41	2nd ,,	
—21·33	34·50	55·23	41·13	74·95	55·29	22·14	1·77	5·03	65·33	21·15	11·62	88·31	1st half	133*b*
129·57	77·60	40·34	56·98	72·79	42·50	12·15	5·10	4·62	53·56	24·38	12·44	64·80	2nd ,,	
...	0·09	...	10·43	13·56	...	...	...	...	...	...	...	3·78	1st half	134*b*
...	0·16	...	4·96	4·29	...	...	...	...	...	...	...	2·99	2nd ,,	
59·86	66·85	43·94	36·88	32·97	86·58	16·76	14·65	8·87	29·37	25·70	49·92	62·94	1st half	135*b*
58·61	86·74	29·82	38·45	34·36	60·21	12·04	11·66	17·34	59·41	32·73	52·99	89·08	2nd ,,	
89·28	52·74	18·98	85·59	22·31	40·04	10·01	23·76	13·24	79·52	24·58	—14·21	42·25	1st half	136*b*
86·43	80·69	19·50	32·14	45·22	36·78	12·72	4·66	16·00	87·58	26·03	6·31	49·84	2nd ,,	
488·77	572·83	424·29	445·88	369·56	679·74	163·45	212·45	260·40	510·21	356·80	471·78	649·68	1st half	137*b*
683·13	622·09	375·87	495·85	417·76	597·65	260·37	217·14	239·10	503·81	396·22	330·54	594·29	2nd ,,	
1·34	1·04	3·69	0·87	0·84	0·86	0·50	2·07	1·82	1·98	1·32	1·31	1·16	1st half	131*c*
1·31	1·09	2·76	0·93	0·97	1·03	0·55	2·00	1·98	1·91	1·24	1·11	1·12	2nd ,,	
2·81	3·94	6·37	2·74	2·59	3·89	2·40	5·67	5·27	3·44	3·37	3·71	4·02	1st half	132*c*
3·44	3·39	4·35	2·34	2·93	4·24	5·83	6·50	4·96	3·59	3·88	2·03	3·46	2nd ,,	
—0·24	0·41	1·82	0·47	1·14	0·52	0·56	0·08	0·15	1·06	0·33	0·14	1·02	1st half	133*c*
1·49	0·91	1·00	0·69	1·08	0·56	0·35	0·21	0·16	0·92	0·39	0·25	0·77	2nd ,,	
...	...	...	0·12	0·21	...	...	...	...	...	...	...	0·04	1st half	134*c*
...	...	...	0·06	0·06	...	...	...	...	...	...	...	0·04	2nd ,,	
0·69	0·80	1·44	0·43	0·51	0·82	0·42	0·65	0·27	0·48	0·41	0·59	0·78	1st half	135*c*
0·62	1·01	0·74	0·47	0·52	0·78	0·49	0·50	0·60	1·08	0·52	0·64	1·06	2nd ,,	
1·02	0·63	0·63	0·97	0·34	0·38	0·24	1·06	0·41	1·27	0·39	—0·76	0·49	1st half	136*c*
0·99	0·94	0·49	0·44	0·67	0·44	0·36	0·19	0·55	1·59	0·42	0·07	0·59	2nd ,,	
5·62	6·82	13·95	5·10	5·63	6·47	4·12	9·53	7·92	8·23	5·62	5·59	7·52	1st half	137*c*
7·85	7·34	9·34	4·93	6·23	7·05	7·58	9·40	8·25	9·14	6·45	4·00	8·03	2nd ,,	
0·26	0·37	1·16	0·28	0·30	0·21	0·16	0·60	0·64	0·66	0·38	0·46	0·34	1st half	131*d*
0·28	0·37	0·90	0·33	0·38	0·28	0·20	0·65	0·76	0·67	0·43	0·40	0·36	2nd ,,	
0·55	1·41	2·00	0·72	0·92	0·97	0·78	1·66	1·86	1·16	1·15	1·31	1·20	1st half	132*d*
0·74	1·13	1·43	0·83	1·14	1·16	2·12	2·16	1·90	1·25	1·35	0·74	1·10	2nd ,,	
—0·05	0·15	0·57	0·15	0·39	0·13	0·18	0·02	0·05	0·36	0·11	0·05	0·30	1st half	133*d*
0·32	0·30	0·33	0·24	0·41	0·15	0·13	0·07	0·06	0·34	0·14	0·06	0·24	2nd ,,	
...	...	...	0·04	0·07	...	...	...	...	...	...	...	0·01	1st half	134*d*
...	...	...	0·02	0·02	...	...	...	...	...	...	...	0·01	2nd ,,	
0·13	0·29	0·45	0·14	0·17	0·20	0·14	0·19	0·10	0·16	0·14	0·21	0·21	1st half	135*d*
0·13	0·34	0·24	0·17	0·20	0·21	0·18	0·16	0·23	0·38	0·18	0·24	0·34	2nd ,,	
0·20	0·22	0·20	0·31	0·14	0·09	0·08	0·30	0·15	0·43	0·13	—0·06	0·14	1st half	136*d*
0·21	0·31	0·16	0·16	0·26	0·12	0·13	0·06	0·21	0·55	0·14	0·03	0·19	2nd ,,	
1·09	2·44	4·38	1·64	1·99	1·60	1·34	1·77	2·80	2·77	1·91	1·97	2·20	1st half	137*d*
1·68	2·45	3·06	1·75	2·41	1·92	2·76	3·10	3·16	3·19	2·24	1·47	2·24	2nd ,,	

and Sagauli Raxaul railway.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.		GAUGE.	5′ 6″										
			Class : No.	1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)	
			Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.	
														TABLE B.—LOCOMOTIVE
	Average price of fuel per ton in terms of	coal	1st half	2·00	6·74	6·30	3·70	3·62	9·09	14·89	10·76	17·86	4·68	
			2nd „	1·93	6·90	6·25	3·70	3·58	8·70	15·33	10·66	17·15	4·65	
		wood	1st half	...	...	...	...	...	...	...	...	...	...	
			2nd „	...	...	...	...	...	...	...	...	...	...	
	PER TOTAL TRAIN-MILE.													
138a	General superintendence including office expenses)	*Annas*	1st half	0·55	0·60	0·74	0·78	0·70	0·52	0·57	0·54	1·13	0·76	
			2nd „	0·61	0·54	0·55	0·87	0·63	0·53	0·58	0·65	1·19	0·83	
139a	Running expenses .	„	1st half	2·10	1·98	1·31	2·06	0·95	0·95	1·66	2·70	3·04	1·91	
			2nd „	2·12	2·01	1·19	2·14	0·83	1·06	1·72	2·79	3·17	1·86	
140a	Fuel	„	1st half	0·91	2·66	2·26	1·42	0·52	3·35	5·12	4·09	7·19	2·28	
			2nd „	0·88	2·97	2·34	1·40	0·56	3·22	5·21	3·90	7·07	2·18	
141a	Water	„	1st half	0·11	0·18	0·19	0·20	0·35	0·11	0·21	0·32	0·58	0·30	
			2nd „	0·10	0·16	0·14	0·20	0·41	0·11	0·22	0·34	0·46	0·32	
142a	Oil, tallow and other stores	„	1st half	0·34	0·30	0·17	0·29	0·36	0·25	0·21	0·40	0·52	0·33	
			2nd „	0·39	0·29	0·30	0·26	0·16	0·25	0·24	0·40	0·46	0·25	
143a	Maintenance and renewal of locomotives .	„	1st half	2·22	6·52	2·03	1·55	0·39	1·00	1·63	3·30	3·53	5·77	
			2nd „	2·18	1·69	0·92	1·92	0·41	0·96	3·03	3·78	3·58	2·51	
143A (a)	Maintenance and renewal of machinery, tools and plant . . .	„	1st half	0·08	0·59	0·07	0·17	0·04	0·10	0·23	0·17	0·35	0·08	
			2nd „	0·16	0·53	0·14	0·07	...	0·13	0·24	0·19	0·42	0·12	
144a	Other charges (net) .	„	1st half	1·04	0·26	0·27	1·55	0·61	1·14	1·45	1·30	1·09	0·88	
			2nd „	1·02	0·23	0·25	1·38	0·79	1·25	1·10	1·23	0·91	0·82	
145a	Total locomotive expenses	„	1st half	7·35	13·09	7·04	8·02	3·92	7·42	11·14	12·87	17·43	12·31	
			2nd „	7·46	8·42	5·74	8·64	3·79	7·51	12·34	13·28	17·26	8·89	
	Fuel consumed in terms of	coal* *lbs.*	1st half	63·93	55·26	40·16	54·05	20·19	46·78	48·15	53·27	56·32	68·31	
			2nd „	63·90	60·19	41·93	53·09	21·72	46·54	47·58	51·18	52·22	65·65	
		wood „	1st half	...	...	...	...	...	...	...	...	...	...	
			2nd „	...	...	...	...	...	...	...	...	...	...	
	PER ENGINE-MILE.													
138b	General superintendence (including office expenses)	*Annas*	1st half	0·44	0·43	0·58	0·70	0·68	0·45	0·50	0·47	0·94	0·65	
			2nd „	0·48	0·38	0·44	0·77	0·62	0·45	0·59	0·57	1·01	0·70	
139b	Running expenses . .	„	1st half	1·67	1·43	1·05	1·85	0·93	0·82	1·45	2·34	2·55	1·61	
			2nd „	1·68	1·40	0·88	1·90	0·81	0·90	1·51	2·44	2·68	1·57	
140b	Fuel	„	1st half	0·72	1·92	1·80	1·28	0·51	2·89	4·49	3·55	6·03	1·93	
			2nd „	0·70	2·07	1·88	1·24	0·55	2·75	4·58	3·40	5·99	1·85	
141b	Water	„	1st half	0·08	0·14	0·16	0·18	0·34	0·09	0·18	0·28	0·49	0·26	
			2nd „	0·08	0·11	0·12	0·18	0·40	0·10	0·19	0·29	0·39	0·27	
142b	Oil, tallow and other stores	„	1st half	0·27	0·21	0·13	0·26	0·35	0·21	0·23	0·34	0·44	0·28	
			2nd „	0·31	0·20	0·24	0·22	0·16	0·22	0·21	0·35	0·39	0·22	
143b	Maintenance and renewal of locomotives	„	1st half	1·76	4·70	1·62	1·30	0·38	0·87	1·43	2·86	2·96	4·87	
			2nd „	1·73	1·19	0·74	1·70	0·40	0·82	2·66	3·31	3·04	2·12	
143 A (b)	Maintenance and renewal of machinery, tools and plant . . .	„	1st half	0·07	0·43	0·05	0·15	0·03	0·09	0·21	0·14	0·29	0·07	
			2nd „	0·13	0·38	0·12	0·07	...	0·11	0·21	0·17	0·36	0·11	
144b	Other charges (net) .	„	1st half	0·83	0·19	0·22	1·39	0·58	0·98	1·28	1·13	0·92	0·74	
			2nd „	0·81	0·16	0·20	1·58	0·77	1·06	0·97	1·07	0·77	0·70	
145b	Total locomotive expenses	„	1st half	5·84	9·45	5·61	7·20	3·80	6·40	9·77	11·11	14·62	10·41	
			2nd „	5·92	5·89	4·62	7·66	3·71	6·41	10·83	11·60	14·63	7·54	
	Fuel consumed in terms of	coal* . *lbs.*	1st half	50·89	39·88	32·01	48·49	19·61	40·34	42·22	46·19	47·25	57·74	
			2nd „	50·73	42·06	33·71	47·06	21·29	39·76	41·76	44·70	44·52	55·71	
		wood . „	1st half	...	...	...	...	...	...	...	...	...	...	
			2nd „	...	...	...	...	...	...	...	...	...	...	

* The standard used is Kurhurbaree coal, except in the case of the Nizam's Guaranteed State railway, which uses Singareni coal.

DIX 46—*contd.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3⅜″											Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. †	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
EXPENSES.														
12·33	7·05	7·70	6·29	...	17·06	...	18·50	19·98	6·93	10·34	15·70	15·16	1st half	
11·57	7·68	8·63	6·70	...	18·68	...	17·97	19·53	7·04	10·41	14·33	14·75	2nd ,,	
...	...	...	...	4·52	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	4·01	...	...	...	...	...	...	...	...	2nd ,,	
0·62	0·55	1·37	0·35	0·65	0·69	0·49	2·06	1·08	1·15	0·84	0·70	0·89	1st half	138*a*
0·58	0·58	1·01	0·40	0·79	0·78	0·50	1·89	1·17	1·24	0·90	0·64	0·87	2nd ,,	
1·95	1·05	1·52	0·77	0·82	1·86	0·79	0·83	1·40	1·46	1·67	1·50	2·68	1st half	139*a*
2·00	1·09	1·41	0·80	0·82	2·91	0·81	0·88	1·48	1·49	1·67	1·44	2·65	2nd ,,	
4·78	1·68	2·64	1·60	2·26	4·41	4·22	5·24	4·29	1·99	2·50	3·55	4·65	1st half	140*a*
4·60	2·03	2·84	1·62	1·95	4·62	3·61	4·79	3·93	2·01	2·62	3·26	4·19	2nd ,,	
0·26	0·12	0·36	0·15	0·12	0·36	0·35	0·58	0·22	0·30	0·23	0·13	0·34	1st half	141*a*
0·26	0·13	0·25	0·16	0·12	0·30	0·34	0·48	0·23	0·33	0·23	0·12	0·32	2nd ,,	
0·35	0·22	0·39	0·21	0·22	0·32	0·59	0·32	0·31	0·24	0·14	0·25	0·35	1st half	142*a*
0·35	0·20	0·18	0·19	0·20	0·30	0·47	0·26	0·37	0·22	0·15	0·23	0·35	2nd ,,	
3·17	1·10	1·81	0·84	1·06	2·16	1·56	1·73	1·78	0·69	2·00	1·91	2·08	1st half	143*a*
2·96	0·98	1·62	0·85	1·23	2·34	1·58	1·20	1·73	0·86	2·01	1·68	2·21	2nd ,,	
0·09	0·22	0·04	0·02	0·18	0·22	0·15	0·39	0·11	0·15	0·29	0·14	0·22	1st half	143 A (*a*)
0·10	0·19	0·06	0·03	0·15	0·27	0·19	0·24	0·15	0·15	0·24	0·13	0·22	2nd ,,	
1·57	1·33	0·40	0·33	0·46	0·67	1·00	...	0·15	0·58	1·19	0·10	0·57	1st half	144*a*
1·73	0·89	0·58	0·52	0·46	0·59	1·00	...	—0·17	1·23	1·71	0·49	0·64	2nd ,,	
12·79	6·27	8·44	4·67	5·77	10·69	9·15	11·15	9·34	6·56	8·86	8·28	11·77	1st half	145*a*
12·94	6·00	7·95	4·57	5·72	11·27	8·50	9·74	8·89	7·53	9·53	7·90	11·45	2nd ,,	
54·33	33·33	37·74	35·61	...	36·18	38·18	34·13	30·06	40·28	33·93	31·64	42·79	1st half	
55·72	36·99	40·09	33·99	...	34·61	36·30	31·63	28·24	39·95	35·24	31·88	39·76	2nd ,,	
...	...	...	...	83·55	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	70·21	...	...	...	...	...	...	...	...	2nd ,,	
0·52	0·44	1·16	0·31	0·52	0·61	0·48	1·92	0·98	1·04	0·75	0·63	0·72	1st half	138*b*
0·49	0·47	0·88	0·35	0·65	0·68	0·48	1·76	1·08	1·11	0·80	0·59	0·71	2nd ,,	
1·64	0·85	1·28	0·67	0·66	1·64	0·74	0·78	1·28	1·33	1·48	1·36	2·18	1st half	139*b*
1·68	0·80	1·21	0·70	0·66	1·77	0·77	0·82	1·37	1·32	1·48	1·31	2·15	2nd ,,	
4·02	1·36	2·23	1·40	1·82	3·87	4·02	4·91	3·93	1·81	2·23	3·23	3·78	1st half	140*b*
3·86	1·63	2·46	1·41	1·59	3·97	3·44	4·48	3·66	1·79	2·33	2·97	3·39	2nd ,,	
0·22	0·10	0·30	0·13	0·10	0·31	0·34	0·54	0·20	0·27	0·20	0·12	0·28	1st half	141*b*
0·22	0·10	0·22	0·14	0·10	0·26	0·32	0·45	0·22	0·29	0·20	0·12	0·26	2nd ,,	
0·30	0·18	0·26	0·18	0·18	0·28	0·36	0·30	0·29	0·22	0·13	0·23	0·30	1st half	142*b*
0·29	0·16	0·16	0·16	0·17	0·26	0·45	0·25	0·35	0·20	0·14	0·21	0·28	2nd ,,	
2·66	0·89	1·53	0·73	0·85	1·90	1·50	1·62	1·63	0·62	1·77	1·74	1·70	1st half	143*b*
2·79	0·78	1·40	0·74	1·00	2·01	1·51	1·13	1·60	0·77	1·78	1·53	1·79	2nd ,,	
0·07	0·18	0·03	0·01	0·15	0·19	0·14	0·36	0·10	0·13	0·26	0·13	0·18	1st half	143 A (*b*)
0·08	0·16	0·05	0·02	0·13	0·23	0·19	0·23	0·14	0·14	0·22	0·12	0·18	2nd ,,	
1·32	1·07	0·34	0·64	0·37	0·59	0·95	...	0·14	0·53	1·05	0·16	0·46	1st half	144*b*
1·45	0·72	0·50	0·45	0·38	0·51	0·95	...	—0·16	1·19	1·52	0·36	0·52	2nd ,,	
10·75	5·07	7·12	4·07	4·65	9·39	8·73	10·43	8·55	5·95	7·87	7·54	9·60	1st half	145*b*
10·86	4·82	6·88	3·97	4·68	9·69	8·11	9·12	8·26	6·72	8·47	7·20	9·28	2nd ,,	
45·68	26·94	31·80	31·09	...	31·76	36·39	31·93	27·53	36·56	30·13	28·83	34·91	1st half	
46·76	29·67	34·67	29·50	...	29·75	34·64	29·64	26·25	35·61	31·30	29·04	32·22	2nd ,,	
...	...	...	...	67·40	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	62·33	...	...	...	...	...	...	...	...	2nd ,,	

† Including the Cawnpore-Barhwal link.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	6 (a) & (b)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal-Central.	Bengal Nagpur.	Rajpur-Dhamtari (2′ 6″)	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	PER 1,000 GROSS TON-MILES.											TABLE B.—LOCOMOTIVE
138c	General superintendence (including office expenses) . . Rs.	1st half	0·09	0·12	0·19	0·14	0·63	0·11	0·11	0·09	0·18	0·12
		2nd „	0·10	0·09	0·13	0·17	0·74	0·12	0·12	0·13	0·21	0·14
139c	Running expenses . . . „	1st half	0·32	0·41	0·34	0·37	0·86	0·20	0·31	0·45	0·48	0·30
		2nd „	0·35	0·35	0·26	0·41	0·96	0·22	0·33	0·56	0·55	0·30
140c	Fuel . . . . . „	1st half	0·14	0·55	0·59	0·25	0·47	0·79	0·97	0·68	1·14	0·36
		2nd „	0·14	0·52	0·35	0·28	0·65	0·67	0·99	0·79	1·24	0·36
141c	Water . . . . . „	1st half	0·02	0·04	0·05	0·04	0·32	0·02	0·04	0·05	0·09	0·05
		2nd „	0·02	0·03	0·03	0·04	0·48	0·02	0·04	0·07	0·08	0·05
142c	Oil, tallow and other stores . „	1st half	0·05	0·06	0·05	0·05	0·33	0·05	0·05	0·06	0·08	0·05
		2nd „	0·06	0·05	0·07	0·05	0·19	0·05	0·05	0·08	0·08	0·04
143c	Maintenance and renewal of locomotives . . . „	1st half	0·34	1·34	0·53	0·28	0·35	0·21	0·31	0·55	0·56	0·02
		2nd „	0·35	0·29	0·21	0·37	0·47	0·20	0·58	0·77	0·63	0·42
143 A (c)	Maintenance and renewal of machinery, tools and plant . „	1st half	0·01	0·12	0·02	0·03	0·03	0·02	0·04	0·03	0·06	0·01
		2nd „	0·03	0·09	0·03	0·01	...	0·03	0·05	0·04	0·07	0·02
144c	Other charges (net) . . „	1st half	0·16	0·05	0·07	0·28	0·54	0·23	0·27	0·22	0·17	0·14
		2nd „	0·16	0·04	0·06	0·34	0·92	0·26	0·21	0·25	0·16	0·14
145c	Total locomotive expenses . „	1st half	1·13	2·69	1·84	1·44	3·53	1·54	2·10	2·13	2·76	1·95
		2nd „	1·21	1·46	1·34	1·67	4·41	1·57	2·36	2·69	3·02	1·47
	Fuel consumed in terms of coal* . lbs.	1st half	157·75	181·90	167·84	156·16	290·28	155·36	145·27	141·59	142·99	173·54
		2nd „	165·40	167·01	156·20	164·26	404·91	155·81	145·40	165·87	147·04	174·11
	wood . „	1st half	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.											TABLE C.—CARRIAGE
146a	General superintendence (including office expenses) . Annas	1st half	0·14	0·32	0·37	0·15	0·18	0·12	0·23	0·17	0·38	0·13
		2nd „	0·16	0·27	0·27	0·18	0·16	0·11	0·25	0·19	0·44	0·15
147a	Repairs and renewals of coaching vehicles . . „	1st half	0·32	0·97	1·38	0·46	0·26	0·75	1·33	0·93	1·65	0·80
		2nd „	0·25	0·82	1·13	0·53	0·41	1·16	0·84	1·35	3·05	0·82
148a	Repairs and renewals of goods vehicles . . „	1st half	1·33	1·53	1·27	0·64	−0·03	3·84	2·67	1·23	2·33	1·36
		2nd „	0·57	0·75	1·67	0·51	0·10	0·87	3·81	1·53	3·98	0·64
148 A (a)	Repairs and renewals of machinery, tools and plant „	1st half	0·06	0·06	0·03	0·01	0·01	0·05	0·05	0·07	0·14	−0·01
		2nd „	0·05	0·07	0·12	0·02	...	0·03	0·02	0·09	0·23	−0·03
149a	Cleaning and oiling . „	1st half	0·23	0·45	0·34	0·34	0·34	0·30	0·31	0·38	0·60	0·31
		2nd „	0·23	0·42	0·30	0·61	0·26	0·33	0·34	0·45	0·65	0·34
150a	Other charges (net) . . „	1st half	0·01	−0·02	0·02	0·08	0·01	0·02	0·04	0·02	1·30	0·01
		2nd „	...	0·03	0·01	0·03	...	0·01	0·06	0·01	1·50	...
151a	Total carriage and wagon expenses . . . . „	1st half	2·09	3·31	2·09	1·97	0·77	5·08	4·63	2·80	6·40	2·60
		2nd „	1·26	2·36	2·07	1·88	0·93	2·51	5·32	3·62	9·85	1·92
	PER 1,000 VEHICLE-MILE RUN BY HOME VEHICLES.											
146b	General superintendence (including office expenses) . . . Rs.	1st half	0·37	1·02	1·49	0·34	0·88	0·24	0·64	0·53	0·89	0·39
		2nd „	0·41	0·67	0·90	0·40	1·16	0·31	0·72	0·68	1·13	0·35
147b	Repairs and renewals of coaching vehicles† . . . „	1st half	3·14	7·74	5·03	3·49	3·57	5·97	11·24	11·45	11·02	8·60
		2nd „	2·28	7·02	4·67	2·66	7·08	8·79	6·58	13·41	18·80	8·13
148b	Repairs and renewals of goods vehicles† . . . . „	1st half	4·63	8·12	6·19	1·94	−0·25	10·59	11·44	5·22	8·33	5·08
		2nd „	2·09	2·62	4·52	1·69	1·22	3·50	17·14	8·62	17·75	1·91
148 A (b)	Repairs and renewals of machinery, tools and plant . „	1st half	0·15	0·20	0·13	0·03	0·06	0·09	0·14	0·23	0·33	−0·03
		2nd „	0·14	0·16	0·39	0·05	...	0·08	0·07	0·31	0·59	0·05
149b	Cleaning and oiling . . . „	1st half	0·60	1·42	1·38	1·36	1·74	0·62	0·90	1·20	1·39	0·87
		2nd „	0·61	1·03	1·09	1·37	1·94	0·86	0·97	1·60	1·69	0·76
150b	Other charges (net) . . „	1st half	0·02	−0·06	0·10	0·16	0·06	0·04	0·14	0·05	3·03	0·02
		2nd „	0·01	0·07	0·02	0·07	...	0·03	0·17	0·04	3·89	...
151b	Total carriage and wagon expenses . . . . „	1st half	5·39	10·55	8·53	4·28	3·89	10·39	13·19	8·84	14·91	7·24
		2nd „	3·30	5·81	6·99	4·23	6·81	6·63	15·20	12·99	25·49	4·41

* The standard used is Kurhurbaree coal, except in the case

† These two items are calculated respectively upon the coaching and goods vehicle-mileage.
‡ Including the Cawnpore-Burhwal link.

DIX 46—*continued.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 3½"													Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 *a*; & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. ‡	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
EXPENSES—*concld.*														
0·12	0·20	0·44	0·12	0·23	0·18	0·17	0·60	0·38	0·38	0·29	0·25	0·25	1st half	138*c*
0·13	0·19	0·34	0·14	0·30	0·21	0·18	0·62	0·45	0·43	0·31	0·24	0·28	2nd ,,	
0·39	0·38	0·47	0·25	0·30	0·47	0·25	0·24	0·49	0·50	0·57	0·53	0·78	1st half	139*c*
0·43	0·33	0·45	0·29	0·32	0·56	0·30	0·29	0·57	0·52	0·58	0·53	0·85	2nd ,,	
0·94	0·60	0·83	0·53	0·79	1·10	1·37	1·34	1·51	0·67	0·85	1·25	1·36	1st half	140*c*
0·99	0·68	0·93	0·59	0·75	1·26	1·31	1·39	1·49	0·70	0·91	1·20	1·34	2nd ,,	
0·05	0·04	0·11	0·05	0·04	0·09	0·13	0·17	0·08	0·10	0·07	0·05	0·10	1st half	141*c*
0·06	0·04	0·08	0·06	0·05	0·08	0·12	0·16	0·09	0·11	0·08	0·05	0·10	2nd ,,	
0·07	0·08	0·09	0·06	0·08	0·08	0·19	0·09	0·11	0·08	0·05	0·09	0·11	1st half	142*c*
0·08	0·07	0·06	0·07	0·08	0·08	0·17	0·08	0·14	0·08	0·05	0·08	0·11	2nd ,,	
0·63	0·39	0·57	0·28	0·37	0·53	0·51	0·51	0·63	0·23	0·68	0·67	0·61	1st half	143*c*
0·72	0·33	0·53	0·31	0·48	0·64	0·58	0·39	0·66	0·30	0·70	0·61	0·70	2nd ,,	
0·02	0·08	0·01	...	0·07	0·05	0·05	0·11	0·04	0·05	0·10	0·05	0·06	1st half	143 A(*c*)
0·02	0·06	0·02	0·01	0·05	0·07	0·07	0·07	0·06	0·05	0·09	0·04	0·07	2nd ,,	
0·31	0·48	0·13	0·24	0·16	0·16	0·32	...	0·05	0·30	0·40	0·03	0·27	1st half	144*c*
0·38	0·30	0·19	0·18	0·18	0·16	0·35	...	0·06	0·43	0·59	0·15	0·20	2nd ,,	
2·53	2·25	2·65	1·54	2·04	2·66	2·98	3·26	3·29	2·21	3·01	2·92	3·44	1st half	145*c*
2·81	2·00	2·60	1·65	2·21	3·06	3·09	3·20	3·40	2·62	3·31	2·90	3·65	2nd ,,	
171·43	191·07	189·43	188·51	...	144·07	199·14	160·18	169·84	216·82	184·79	173·67	200·43	1st half	
193·63	197·44	209·91	196·55	...	150·47	211·37	168·39	173·20	222·83	195·93	187·31	202·80	2nd ,,	
...	...	...	...	472·58	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	471·65	...	...	...	...	...	...	...	...	2nd ,,	
AND WAGON EXPENSES.														
0·16	0·30	0·45	0·13	0·23	0·24	0·11	0·23	0·32	0·12	0·25	0·23	0·25	1st half	146*a*
0·15	0·30	0·34	0·14	0·27	0·29	0·13	0·24	0·35	0·12	0·27	0·21	0·25	2nd ,,	
0·96	0·73	0·87	0·31	0·62	1·01	0·62	2·29	0·68	0·26	0·88	0·84	0·77	1st half	147*a*
1·05	1·30	0·68	0·29	0·40	2·00	0·53	3·65	0·45	0·21	0·86	1·10	0·87	2nd ,,	
1·31	0·86	0·84	0·35	0·79	1·43	0·34	0·82	0·50	0·09	1·15	1·45	1·07	1st half	148*a*
1·05	0·51	0·62	0·31	0·63	2·60	0·53	0·90	0·20	0·07	1·06	0·82	1·19	2nd ,,	
0·05	0·04	0·02	0·01	0·02	0·09	0·02	0·04	0·06	0·04	0·05	0·05	0·05	1st half	148 A(*a*)
0·07	0·05	0·01	0·01	0·03	0·15	0·02	0·01	0·07	0·05	0·03	0·04	0·05	2nd ,,	
0·36	0·25	0·26	0·24	0·24	0·37	0·29	0·39	0·23	0·25	0·17	0·26	0·32	1st half	149*a*
0·33	0·25	0·25	0·28	0·24	0·43	0·45	0·32	0·25	0·28	0·19	0·24	0·31	2nd ,,	
0·20	0·05	0·01	0·01	0·19	0·01	...	0·03	...	...	—0·01	0·10	0·04	1st half	150*a*
0·24	0·08	0·01	...	0·02	0·03	0·01	0·03	...	...	—0·01	—0·02	0·03	2nd ,,	
3·04	2·23	2·45	1·08	2·09	3·15	1·38	3·77	1·79	0·76	2·49	2·73	2·50	1st half	151*a*
2·89	2·49	1·91	1·03	1·59	5·50	1·67	5·70	1·32	0·73	2·40	2·39	2·70	2nd ,,	
0·45	0·86	1·28	0·30	0·57	0·50	0·37	0·89	0·80	0·44	0·72	0·71	0·63	1st half	146*b*
0·45	0·79	0·98	0·39	0·73	0·64	0·41	0·78	0·93	0·40	0·79	0·70	0·71	2nd ,,	
2·77	5·75	4·38	2·41	4·93	8·63	2·02	10·95	1·68	2·50	7·66	5·24	5·10	1st half	147*b*
8·89	6·01	4·39	1·74	2·79	13·11	1·75	14·93	1·21	1·86	6·89	6·77	5·97	2nd ,,	
3·81	6·81	5·14	1·30	2·68	4·10	1·08	14·52	1·24	0·45	4·97	8·87	4·31	1st half	148*b*
5·22	2·04	3·19	1·66	2·86	8·94	1·73	14·28	0·53	0·04	4·75	5·68	5·87	2nd ,,	
0·15	0·12	0·04	0·03	0·06	0·20	0·05	0·05	0·14	0·14	0·14	0·14	0·13	1st half	148 A(*b*)
0·20	0·14	0·04	0·04	0·08	0·34	0·08	0·05	0·20	0·14	0·09	0·14	0·14	2nd ,,	
1·04	0·73	0·71	0·58	0·56	0·79	0·93	1·46	0·55	0·86	0·49	0·80	0·79	1st half	149*b*
1·06	0·66	0·72	0·76	0·66	0·97	1·47	1·21	0·68	0·97	0·54	0·80	0·86	2nd ,,	
0·58	0·14	0·04	0·01	0·44	0·03	0·03	0·11	...	...	—0·04	—0·28	0·10	1st half	150*b*
0·76	0·21	0·04	0·01	0·06	0·09	0·02	0·09	...	...	—0·02	—0·09	0·08	2nd ,,	
8·80	6·41	11·59	2·62	4·97	6·76	4·48	27·98	4·41	2·39	7·18	8·45	6·27	1st half	151*b*
9·05	6·59	9·36	2·87	4·35	12·40	5·46	31·34	3·55	2·51	6·92	7·80	7·52	2nd ,,	

of the Nizam's Guaranteed State railway, which uses Singareni coal.
all other items in the table being calculated upon the aggregate of b th coaching and goods vehicle-mileages.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gaug.	5′ 6″										
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) & (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) and (*b*).	
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central	Bengal-Nagpur	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.	
	PER TOTAL TRAIN-MILE.												
152 *a*	General superintendence (including office expenses) . . *Annas*	1st half	0·59	1·31	1·24	0·76	0·01	0·63	0·56	0·43	0·87	0·45	
		2nd „	0·60	1·25	0·93	0·94	0·01	0·63	0·59	0·52	0·96	0·47	
153 *a*	Station staff . . . . „	1st half	2·37	5·50	3·40	1·86	1·23	2·22	2·24	1·87	3·21	1·73	
		2nd „	2·33	5·72	3·49	1·86	1·10	2·22	2·38	2·08	3·57	1·83	
154 *a*	Train staff . . . . „	1st half	1·03	0·97	0·66	0·60	0·22	0·70	0·79	1·01	0·86	0·67	
		2nd „	1·07	0·95	0·48	0·61	0·26	0·71	0·83	1·23	0·93	0·67	
155 *a*	Fuel, lighting, water and general stores . . „	1st half	0·46	1·01	0·73	0·49	...	0·61	0·52	0·52	0·87	0·57	
		2nd „	0·49	0·92	0·56	0·50	...	0·47	0·53	0·67	1·04	0·61	
156 *a*	Clothing . . . . . „	1st half	0·05	0·03	0·05	0·01	...	0·12	0·04	0·10	0·12	0·01	
		2nd „	0·04	0·10	0·03	0·02	...	0·05	0·11	0·04	0·09	0·03	
157 *a*	Printing, stationery and tickets . . . . „	1st half	0·20	0·37	0·28	0·32	...	0·25	0·20	0·25	0·46	0·28	
		2nd „	0·22	0·39	0·41	0·36	...	0·30	0·25	0·44	0·47	0·26	
158 *a*	Charges for delivery and collection of goods, etc. . „	1st half	0·01	0·01	...	0·01	...	0·01	...	0·01	...	...	
		2nd „	0·01	0·02	...	0·01	...	0·01	...	0·01	...	...	
159 *a*	Miscellaneous expenses . „	1st half	0·03	0·10	0·02	...	...	...	...	0·02	0·03	0·01	
		2nd „	0·03	0·09	0·02	0·01	...	...	...	0·02	0·03	0·01	
160 *a*	Payments to other lines . „	1st half	0·04	0·07	0·26	0·86	...	0·13	0·03	0·11	0·04	0·40	
		2nd „	0·07	...	0·25	0·69	...	0·11	0·03	0·11	0·05	0·47	
161 *a*	Other charges (net) . . „	1st half	0·01	0·01	...	0·03	...	0·01	0·04	0·01	...	...	
		2nd „	0·01	0·01	...	0·04	...	0·01	0·03	0·01	0·01	...	
162 *a*	Total traffic expenses . „	1st half	4·79	9·40	7·14	4·74	1·46	4·67	4·42	4·33	6·46	4·12	
		2nd „	4·87	9·46	6·17	5·04	1·37	4·51	4·73	5·15	7·15	4·35	
	PER CENT. ON TRAFFIC EARNINGS. *(Abstracts H and I of Revenue Accounts.)*												
152 *b*	General superintendence (including office expenses) . . *Per cent.*	1st half	0·86	2·06	2·35	1·38	0·06	1·33	0·99	0·66	0·82	0·60	
		2nd „	0·95	1·57	1·78	1·97	0·09	1·44	1·08	1·02	1·07	0·69	
153 *b*	Station staff . . . . „	1st half	3·48	8·67	6·47	3·40	5·35	4·67	3·09	2·86	3·04	2·33	
		2nd „	3·68	7·18	6·71	3·91	8·06	5·09	4·35	4·07	4·01	2·70	
154 *b*	Train staff . . . . „	1st half	1·52	4·53	1·26	1·10	0·96	1·48	1·42	1·54	0·82	0·90	
		2nd „	1·68	1·19	0·91	1·29	1·88	1·62	1·52	2·40	1·05	0·98	
155 *b*	Fuel, lighting, water and general stores . . „	1st half	0·68	1·59	1·38	0·89	...	1·28	0·92	0·80	0·83	0·77	
		2nd „	0·77	1·15	1·06	1·06	—0·05	1·07	0·96	1·31	1·16	0·90	
156 *b*	Clothing . . . . . „	1st half	0·07	0·13	0·10	0·01	0·02	0·22	0·08	0·15	0·11	...	
		2nd „	0·06	0·12	0·06	0·04	...	0·13	0·20	0·07	0·10	0·04	
157 *b*	Printing, stationery and tickets . . . . „	1st half	0·29	0·58	1·49	0·59	...	0·52	0·34	0·39	0·43	0·38	
		2nd „	0·35	0·48	0·80	0·76	...	0·69	0·45	0·87	0·53	0·38	
158 *b*	Charges for delivery and collection of goods, etc. . „	1st half	0·02	0·02	...	0·01	...	0·03	...	0·02	...	...	
		2nd „	0·01	0·02	...	0·02	...	0·03	...	0·02	...	...	
159 *b*	Miscellaneous expenses . „	1st half	0·04	0·16	0·05	0·01	...	...	0·01	0·02	0·02	0·01	
		2nd „	0·05	0·11	0·04	0·02	...	...	0·01	0·04	0·03	0·01	
160 *b*	Payments to other lines . „	1st half	0·06	0·06	0·48	1·21	...	0·28	0·05	0·18	0·04	0·54	
		2nd „	0·12	...	0·49	1·45	...	0·26	0·05	0·22	0·06	0·70	
161 *b*	Other charges (net) . . „	1st half	0·02	0·02	0·01	0·06	...	0·03	0·06	0·01	...	...	
		2nd „	0·02	0·01	...	0·09	...	0·03	0·06	0·02	0·01	...	
162 *b*	Total traffic expenses . „	1st half	7·04	14·82	13·59	8·66	6·39	9·84	7·86	6·63	6·11	5·53	
		2nd „	7·69	11·83	11·85	10·61	9·98	10·34	8·68	10·04	8·02	6·40	
	General superintendence per cent. on traffic earnings (including steamboat) . . . *Per cent.*	1st half	0·86	2·06	2·35	1·38	0·06	1·33	0·99	0·66	0·82	0·60	
		2nd „	0·95	1·57	1·78	1·97	0·09	1·44	1·09	1·02	1·07	0·69	

TABLE D.—TRAFFIC

DIX 46—*continued.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

10 (*a*) to (*c*)	2(*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Gauge. Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. *	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
						3′ 3⅜″								
EXPENSES.														
0·69	0·91	1·43	0·62	0·72	0·54	0·63	2·20	1·15	0·60	0·70	0·62	0·72	1st half	152*a*
0·70	0·89	1·09	0·67	0·91	0·62	0·58	2·21	1·44	0·68	0·73	0·61	0·71	2nd ,,	
2·10	2·40	3·55	1·50	1·49	1·97	1·10	2·46	3·01	1·53	1·67	1·25	2·41	1st half	153*a*
2·14	2·12	2·89	1·62	1·55	2·38	1·02	2·04	3·01	1·56	1·70	1·72	2·34	2nd ,,	
0·65	0·59	0·78	0·45	0·36	0·53	0·21	0·29	0·45	0·66	0·61	0·41	0·62	1st half	154*a*
0·65	0·59	0·63	0·49	0·41	0·61	0·22	0·24	0·52	0·71	0·59	0·40	0·64	2nd ,,	
0·36	0·45	0·97	0·43	0·60	0·53	0·48	0·51	0·58	0·48	0·41	0·41	0·58	1st half	155*a*
0·41	0·54	0·70	0·40	0·50	0·68	0·41	0·49	0·82	0·70	0·34	0·27	0·56	2nd ,,	
0·06	0·04	0·03	0·04	...	0·07	0·03	0·16	0·06	...	0·07	0·04	0·07	1st half	156*a*
0·07	0·05	0·05	0·07	0·08	0·06	0·02	0·10	0·03	0·01	0·12	0·06	0·14	2nd ,,	
0·45	0·26	0·36	0·17	0·27	0·28	0·38	0·71	0·48	0·22	0·26	0·27	0·38	1st half	157*a*
0·42	0·25	0·27	0·19	0·43	0·31	0·32	0·45	0·53	0·25	0·26	0·50	0·44	2nd ,,	
0·01	...	...	0·12	...	...	...	...	...	...	...	...	...	1st half	158*a*
0·42	...	...	0·08	...	...	...	...	...	...	...	...	...	2nd ,,	
0·05	0·01	0·01	0·03	0·04	0·02	0·03	...	0·03	0·01	0·02	0·01	0·03	1st half	159*a*
0·01	0·01	0·01	0·06	0·03	0·02	0·01	0·01	0·03	0·02	0·02	0·01	0·03	2nd ,,	
0·07	...	...	0·08	0·19	0·02	0·03	0·27	0·25	0·27	0·20	0·09	...	1st half	160*a*
0·05	...	...	0·09	0·36	0·04	0·12	0·27	0·25	0·48	0·22	0·07	...	2nd ,,	
0·05	0·08	0·01	0·11	...	...	...	...	0·02	...	0·03	0·01	0·03	1st half	161*a*
0·05	0·11	0·01	0·12	...	...	...	...	0·02	...	0·05	...	0·03	2nd ,,	
4·49	4·74	7·14	3·55	3·67	3·96	2·89	6·10	6·04	3·77	3·97	3·89	4·27	1st half	162*a*
4·54	4·56	5·65	3·79	4·27	4·72	2·70	5·81	6·65	4·59	4·03	3·64	4·89	2nd ,,	
1·16	1·84	3·18	1·49	1·43	0·81	1·35	2·90	1·96	1·23	1·66	1·23	1·23	1st half	152*b*
1·33	1·65	2·98	2·13	2·38	1·08	1·58	3·90	3·00	1·94	1·97	1·28	1·56	2nd ,,	
3·53	4·85	7·74	3·66	2·97	3·60	2·41	3·24	5·11	3·14	3·99	3·44	4·08	1st half	153*b*
4·09	3·94	7·90	5·13	4·01	4·09	2·83	3·60	6·28	4·99	4·48	3·64	5·10	2nd ,,	
1·09	1·19	1·70	1·10	0·71	0·81	0·46	0·38	0·76	2·34	1·46	0·86	1·05	1st half	154*b*
1·24	1·11	1·71	1·53	1·07	1·04	0·60	0·43	1·18	1·99	1·56	0·85	1·38	2nd ,,	
0·61	0·92	2·11	1·06	1·18	0·81	1·04	0·68	0·99	0·99	0·97	0·81	0·99	1st half	155*b*
0·78	1·01	1·90	1·27	1·31	1·16	1·14	0·86	1·70	1·37	0·89	0·56	1·21	2nd ,,	
0·09	0·08	0·07	0·08	0·01	0·01	0·05	0·08	0·11	...	0·18	0·07	0·11	1st half	156*b*
0·13	0·09	0·15	0·22	0·21	0·10	0·05	0·17	0·06	0·03	0·31	0·13	0·23	2nd ,,	
0·76	0·54	0·78	0·42	0·54	0·43	0·81	0·03	0·81	0·44	0·62	0·53	0·53	1st half	157*b*
0·57	0·46	0·74	0·60	1·10	0·53	0·89	0·80	1·12	0·70	0·70	1·05	0·96	2nd ,,	
0·02	...	...	0·29	...	...	...	...	...	...	...	...	...	1st half	158*b*
0·03	...	...	0·26	...	...	...	...	...	...	...	...	...	2nd ,,	
0·08	0·02	0·02	0·08	0·08	0·01	0·05	...	0·05	0·03	0·05	0·02	0·05	1st half	159*b*
0·09	0·02	0·02	0·19	0·08	0·03	0·02	0·03	0·07	0·04	0·06	0·03	0·06	2nd ,,	
0·12	...	...	0·20	0·27	0·04	0·06	0·36	0·44	0·56	0·48	0·17	...	1st half	160*b*
0·15	...	...	0·30	0·93	0·06	0·33	0·49	0·52	1·31	0·52	0·16	...	2nd ,,	
0·08	0·16	0·03	0·27	0·01	0·01	...	...	0·03	...	0·06	0·03	0·05	1st half	161*b*
0·11	0·20	0·02	0·44	−0·01	0·01	...	...	0·05	...	0·14	...	0·07	2nd ,,	
7·54	9·60	15·56	8·65	7·30	6·04	6·23	8·57	10·26	7·73	9·47	7·04	8·09	1st half	162*b*
8·69	8·48	15·42	11·56	11·08	8·10	7·44	10·28	13·88	12·97	10·62	7·69	10·65	2nd ,,	
1·16	1·10	3·11	1·39	1·43	0·81	1·35	2·90	1·96	1·23	1·66	1·23	1·23	1st half	
1·33	1·52	2·98	1·98	2·38	1·08	1·58	3·90	3·00	1·94	1·91	1·28	1·55	2nd ,,	

* Including the Cawnpore-Burhwal link.

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5 (*a*) to (*b*)	6 (*a*) to (*e*)	7 (*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) and (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (2′ 6″).	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	PER TOTAL TRAIN-MILE.										TABLE E.—GENERAL	
163*a*	Home expenditure . . *Annas*	1st half	*0·33	0·28	1·99	0·91	1·15	0·15	0·09	0·35	0·30	0·56
		2nd ,,	*0·36	...	1·46	1·04	1·33	...	...	0·44	0·35	0·70
164*a*	Agent's office—salaries and expenses . . . . ,,	1st half	0·11	0·31	1·42	0·30	...	0·19	0·16	0·16	0·25	0·25
		2nd ,,	0·14	0·31	1·06	0·31	...	0·22	0·17	0·16	0·29	0·26
165*a*	Audit, accounts and pay office ,,	1st half	0·45	0·79	1·81	0·70	...	0·59	0·47	0·51	0·95	0·96
		2nd ,,	0·46	0·76	1·37	0·81	...	0·09	0·52	0·60	1·09	1·01
166*a*	Stores Department . . ,,	1st half	0·14	0·11	0·23	0·17	...	0·14	0·13	0·15	0·36	0·14
		2nd ,,	0·15	0·12	0·14	0·17	...	0·16	0·12	0·18	0·43	0·22
167*a*	Medical ,, . . ,,	1st half	0·13	0·20	0·22	0·19	...	0·09	0·13	0·09	0·21	0·14
		2nd ,,	0·15	0·18	0·16	0·24	...	0·11	0·13	0·11	0·25	0·16
168*a*	Rents and miscellaneous . ,,	1st half	0·19	0·36	1·00	0·32	...	0·24	0·19	0·17	0·38	0·27
		2nd ,,	0·18	0·20	0·65	0·31	...	0·21	0·14	0·15	0·36	0·33
169*a*	Police . . . . ,,	1st half	0·20	0·12	0·50	0·16	0·08	0·15	0·15	0·18	0·48	0·53
		2nd ,,	0·20	0·16	0·37	0·27	0·06	0·17	0·15	0·24	0·53	0·57
170*a*	Advertising . . . ,,	1st half	0·01	0·01	0·05	0·03	...	0·01	0·01	0·01	0·01	0·01
		2nd ,,	0·01	0·02	0·06	0·03	...	0·02	0·01	0·01	0·01	0·02
171*a*	Electric telegraph . . ,,	1st half	0·61	0·99	1·06	0·92	0·62	0·57	0·69	0·57	1·13	0·53
		2nd ,,	0·27	0·85	0·92	1·01	0·61	0·64	0·74	0·66	1·28	0·56
172*a*	Other charges (net) . . ,,	1st half	...	...	...	...	...	...	...	0·01	...	...
		2nd ,,	...	...	...	...	...	...	...	0·01	...	0·01
173*a*	Total general charges . ,,	1st half	2·17	3·07	8·28	3·70	1·85	2·13	2·02	2·20	4·07	3·33
		2nd ,,	2·42	2·60	6·19	4·19	2·00	2·22	1·98	2·57	4·59	3·84
	PER CENT. ON TOTAL EARNINGS.											
163*b*	Home expenditure . . *Per cent.*	1st half	0·48	0·46	3·15	1·61	4·88	0·28	0·17	0·54	0·27	0·74
		2nd ,,	0·56	...	2·77	2·08	9·26	...	...	0·84	0·38	0·96
164*b*	Agent's office—salaries and expenses . . ,,	1st half	0·17	0·51	2·25	0·51	...	0·37	0·28	0·25	0·23	0·33
		2nd ,,	0·21	0·44	2·01	0·63	...	0·47	0·30	0·31	0·31	0·36
165*b*	Audit, accounts and pay office . . . . ,,	1st half	0·65	1·30	2·85	1·24	...	1·13	0·83	0·77	0·88	1·26
		2nd ,,	0·71	1·06	2·59	1·63	...	1·46	0·94	1·15	1·19	1·40
166*b*	Stores Department . . ,,	1st half	0·20	0·17	0·36	0·29	...	0·26	0·23	0·22	0·33	0·18
		2nd ,,	0·23	0·17	0·27	0·34	...	0·34	0·23	0·36	0·47	0·30
167*b*	Medical ,, . . ,,	1st half	0·18	0·32	0·33	0·33	...	0·18	0·12	0·14	0·20	0·19
		2nd ,,	0·23	0·25	0·31	0·47	...	0·22	0·23	0·22	0·27	0·22
168*b*	Rents and miscellaneous ,,	1st half	0·27	0·42	1·59	0·57	...	0·45	0·33	0·26	0·35	0·36
		2nd ,,	0·28	0·28	1·24	0·63	...	0·44	0·25	0·29	0·40	0·45
169*b*	Police . . . . ,,	1st half	0·29	0·27	0·80	0·30	0·35	0·28	0·26	0·28	0·44	0·70
		2nd ,,	0·32	0·23	0·70	0·53	0·40	0·36	0·27	0·47	0·59	0·78
170*b*	Advertising . . . ,,	1st half	0·01	0·02	0·08	0·05	...	0·01	0·01	0·01	0·01	0·01
		2nd ,,	0·03	0·03	0·11	0·07	...	0·04	0·01	0·02	0·01	0·02
171*b*	Electric telegraph . . ,,	1st half	0·88	1·62	1·67	1·61	2·64	1·08	1·23	0·86	1·04	0·71
		2nd ,,	1·19	1·19	1·75	2·03	4·27	1·34	1·32	1·28	1·41	0·76
172*b*	Other charges (net) . ,,	1st half	0·01	0·01	...	...	...	...	0·01	0·01	...	...
		2nd ,,	...	...	...	...	...	...	0·01	0·02	...	0·01
173*b*	Total general charges . ,,	1st half	3·14	5·10	13·08	6·51	7·87	4·04	3·55	3·34	3·75	4·48
		2nd ,,	3·76	3·65	11·75	8·41	13·93	4·67	3·56	4·96	5·03	5·26
	PER CENT. ON GROSS EARNINGS.										TABLE G.—SPECIAL AND	
174	Law charges . . . *Per cent.*	1st half	0·02	0·02	0·15	0·01	...	...	...	0·01	...	0·16
		2nd ,,	0·04	0·04	0·12	0·01	...	...	...	0·01	0·01	0·01
175	Compensation . . ,,	1st half	0·16	0·37	0·15	0·08	0·03	0·14	0·10	0·17	0·20	0·02
		2nd ,,	0·29	0·27	0·03	0·04	...	0·25	0·50	0·13	0·24	0·01
176	Rates and taxes . . ,,	1st half	0·14	0·21	0·36	0·10	...	0·01	0·12	0·10	0·11	...
		2nd ,,	0·15	0·18	0·28	0·07	...	0·07	0·12	0·15	0·14	0·01
177	Payments to other lines . ,,	1st half	0·70	1·06	3·10	1·62	...	1·38	0·25	1·36	0·25	1·11
		2nd ,,	1·08	1·12	6·03	1·66	...	0·92	0·22	1·39	0·20	0·46
178	Other charges (net) . ,,	1st half	0·22	1·20	0·48	1·36	0·72	0·71	1·11	0·79	0·34	1·07
		2nd ,,	0·26	0·86	1·60	1·35	1·10	0·95	1·07	1·47	0·53	1·73
179	Total special and miscellaneous expenses . . ,,	1st half	1·24	2·86	4·24	3·17	0·73	2·24	1·58	2·43	0·90	2·36
		2nd ,,	1·82	2·47	8·06	3·13	1·10	2·19	1·91	3·15	0·12	2·22

* Including cost of Government controlling establishment.
† Including the Cawnpore Burhwal link.

DIX 46—*continued.*

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

	3′ 3⅜″											Gauge.	
10 (*a*) to (*c*)	2 (*b*) to (*d*).	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. †	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad. Porbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
CHARGES.														
0·35		2·44	0·45	0·77	0·18	...	...	0·15	0·76	0·85	0·80	0·80	1st half	163*a*
0·37		2·01	0·47	1·05	0·23	...	...	0·17	1·01	0·81	0·78	0·78	2nd ,,	
0·25		1·16	0·17	0·38	0·15	0·14	1·90	0·78	0·34	0·31	0·24	0·26	1st half	164*a*
0·84		0·85	0·13	0·43	0·19	0·13	1·71	0·87	0·38	0·31	0·22	0·28	2nd ,,	
0·69		2·41	0·74	0·87	0·59	0·52	1·27	1·68	1·27	0·75	0·77	0·65	1st half	165*a*
0·67		1·81	0·68	1·02	0·71	0·66	1·09	1·78	1·45	0·79	0·73	0·69	2nd ,,	
0·11		1·02	0·08	0·24	0·22	0·11	0·14	0·37	0·18	0·19	0·20	0·20	1st half	166*a*
0·10		0·60	0·08	0·27	0·28	0·11	0·15	0·42	0·32	0·21	0·20	0·21	2nd ,,	
0·12		0·69	0·08	0·09	0·13	0·07	0·29	0·44	0·27	0·15	0·18	0·14	1st half	167*a*
0·13		0·45	0·09	0·10	0·16	0·11	0·23	0·52	0·35	0·18	0·18	0·15	2nd ,,	
0·15		0·33	0·12	0·27	0·23	0·11	0·56	0·35	0·35	0·16	0·14	0·13	1st half	168*a*
0·14		0·25	0·14	0·35	0·23	0·10	0·30	0·49	0·48	0·18	0·15	0·15	2nd ,,	
0·25		0·43	0·21	0·33	0·29	0·08	...	1·10	0·53	0·42	0·32	0·44	1st half	169*a*
0·25		0·33	0·24	0·38	0·35	0·10	...	1·22	0·61	0·40	0·23	0·37	2nd ,,	
0·02		0·01	0·01	0·01	0·01	...	...	0·01	0·01	0·02	...	0·02	1st half	170*a*
0·02		...	0·01	0·02	0·01	0·01	...	0·01	0·04	0·02	0·01	0·02	2nd ,,	
0·81		1·87	0·56	0·70	0·70	0·74	1·06	1·29	0·67	0·98	0·67	0·76	1st half	171*a*
0·50		1·51	0·63	0·76	0·84	0·87	0·95	1·49	0·76	0·92	0·61	0·75	2nd ,,	
0·14		...	...	...	...	...	...	...	...	0·02	...	...	1st half	172*a*
0·15		...	...	...	...	...	...	...	0·16	0·01	...	...	2nd ,,	
2·89		10·30	2·42	3·66	2·50	1·77	5·23	6·17	4·38	3·81	3·32	3·40	1st half	173*a*
3·47		7·81	2·47	4·38	3·00	2·09	4·45	6·97	5·55	3·83	3·11	3·40	2nd ,,	
0·56	Included with the 5′ 6″ gauge.	4·94	0·97	1·45	0·27	...	...	0·25	1·44	1·99	1·56	1·33	1st half	163*b*
0·68		5·00	1·32	2·55	0·38	...	...	0·34	2·69	2·30	1·69	1·66	2nd ,,	
0·41		2·23	0·38	0·73	0·23	0·31	2·48	1·30	0·64	0·73	0·46	0·44	1st half	164*b*
1·55		2·12	0·36	1·05	0·32	0·33	3·00	1·78	1·00	0·80	0·46	0·60	2nd ,,	
1·12		4·87	1·60	1·67	0·88	1·11	1·65	2·80	2·43	1·75	1·50	1·07	1st half	165*b*
1·25		4·49	1·92	2·48	1·19	1·77	1·92	3·62	3·88	2·05	1·51	1·48	2nd ,,	
0·18		2·06	0·17	0·46	0·33	0·23	0·18	0·62	0·35	0·44	0·39	0·33	1st half	166*b*
0·19		1·50	0·24	0·65	0·47	0·31	0·27	0·85	0·84	0·55	0·40	0·44	2nd ,,	
0·20		1·40	0·18	0·17	0·19	0·14	0·38	0·74	0·52	0·36	0·34	0·24	1st half	167*b*
0·24		1·12	0·25	0·24	0·27	0·29	0·45	1·07	0·92	0·48	0·37	0·33	2nd ,,	
0·25		0·67	0·27	0·50	0·35	0·24	0·73	0·60	0·67	0·38	0·28	0·23	1st half	168*b*
0·26		0·62	0·39	0·79	0·40	0·27	0·53	1·00	1·29	0·46	0·31	0·32	2nd ,,	
0·40		0·86	0·45	0·63	0·44	0·17	...	1·83	1·01	0·97	0·62	0·73	1st half	169*b*
0·47		0·82	0·67	0·92	0·58	0·25	...	2·48	1·62	1·04	0·47	0·79	2nd ,,	
0·03		0·02	0·01	0·03	0·01	...	...	0·02	0·01	0·05	0·01	0·03	1st half	170*b*
0·04		0·01	0·02	0·06	0·01	0·02	...	0·02	0·10	0·04	0·02	0·04	2nd ,,	
1·31		3·77	1·24	1·33	1·05	1·58	1·38	2·16	1·26	2·23	1·32	1·25	1st half	171*b*
1·49		3·75	1·38	1·85	1·40	2·35	1·67	3·04	2·02	2·39	1·26	1·61	2nd ,,	
0·23		...	...	...	...	1·25	...	...	...	0·01	...	0·01	1st half	172*b*
0·27		...	...	...	0·01	...	...	...	0·45	0·02	0·01	0·01	2nd ,,	
4·69		20·82	5·27	7·00	3·75	3·78	6·80	10·32	8·33	8·91	6·49	5·66	1st half	173*b*
6·44		19·43	6·95	10·59	5·03	5·39	7·84	14·20	14·81	9·93	6·41	7·28	2nd ,,	
MISCELLANEOUS EXPENSES.														
0·02		0·15	0·05	0·16	...	...	...	0·02	0·26	0·01	...	0·01	1st half	174
0·02		0·05	0·06	0·15	0·01	...	...	0·03	0·03	0·03	...	0·01	2nd ,,	
0·04		0·06	0·20	0·15	0·20	0·06	0·04	0·06	0·05	0·02	0·03	...	1st half	175
0·02		0·01	0·10	0·11	0·24	0·52	...	0·03	0·02	0·04	0·02	0·06	2nd ,,	
0·10		0·22	0·04	...	0·11	...	...	...	0·01	0·15	0·12	0·24	1st half	176
0·29		0·18	0·04	0·01	0·14	...	...	...	0·01	0·03	0·22	0·09	2nd ,,	
...		...	1·54	0·02	0·25	2·49	1·73	0·18	0·12	0·09	0·12	...	1st half	177
0·20		...	0·33	0·18	0·20	1·49	1·81	0·14	0·28	0·10	0·12	...	2nd ,,	
1·17		1·95	1·32	0·41	0·44	0·27	0·31	1·35	0·54	1·28	0·58	0·93	1st half	178
1·22		5·03	2·41	0·59	0·53	0·81	0·47	1·12	1·87	1·54	0·61	1·15	2nd ,,	
1·33		2·38	3·15	0·74	1·00	2·62	2·08	1·61	0·98	1·35	0·90	1·18	1st half	179
1·75		5·27	2·94	1·04	1·12	2·82	2·28	1·32	2·21	1·74	0·97	1·31	2nd ,,	

P. T. O.

Appendix 46.
Analysis.

APPEN

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″									
		Class: No.	1	2 (*a*)	3	4 (*a*)	4 (*b*)	5(*a*) & (*b*)	6(*a*) to (*e*)	7(*a*) to (*g*)	8 (*a*) to (*f*)	9 (*a*) & (*b*)
		Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur Dhamtari. (2′ 6″)	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
	FROM APPENDIX I.											
180	Average number of locomotives on the line. . . *No.*	1st half	834	123	21	174	3	175	643	772	187	52
		2nd „	853	128	27	189	4	177	635	772	183	56
181	Average miles run per locomotive *per diem* . . . . *Miles*	1st half	71·80	64·22	51·54	77·25	49·51	80·88	64·82	63·73	53·13	64·56
		2nd „	66·24	69·15	53·14	66·22	37·60	74·58	61·39	53·46	46·89	56·28
	lbs. coal per engine-mile (coal burning engines)—											
182	Coaching . . . *lbs.*	1st half									46·24	44·45
		2nd „									44·56	46·01
183	Goods . . . . „	1st half									48·10	60·09
		2nd „	50·80 / 50·73	48·68 / 50·32	40·02 / 42·13	48·49 / 47·66	19·61 / 21·29	40·34 / 39·76	42·22 / 41·76	46·00 / 54·00	44·47	56·55
184	Mixed . . . . „	1st half									49·47	57·66
		2nd „									44·98	56·54
	lbs. wood per engine-mile (wood burning engines)—											
185	Coaching . . . *lbs.*	1st half	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...
186	Goods . . . . „	1st half	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...
187	Mixed . . . . „	1st half	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...
	Average gross weight of trains—											
188	Coaching . . . *Tons*	1st half	178·90	166·52	216·72	238·06	63·66	165·06	209·49	182·14	163·59	125·07
		2nd „	170·09	163·76	186·80	213·80	21·96	171·76	205·98	156·90	152·96	131·07
189	Goods . . . . „	1st half	428·54	317·16	173·36	353·34	72·04	316·72	313·40	382·00	513·86	450·77
		2nd „	415·79	480·38	297·27	370·80	55·79	414·85	317·02	322·71	518·62	345·31
190	Mixed . . . . „	1st half	222·87	234·80	150·24	339·85	68·95	214·33	239·28	...	284·28	264·32
		2nd „	223·13	241·73	174·45	315·55	43·67	193·38	236·84	...	259·74	308·85
	Average through speed of trains—											
191	Coaching . *Miles per hour*	1st half	20·40	19·07	16·00	25·69	...	28·73	22·37	23·41	20·37	22·86
		2nd „	20·30	19·07	20·00	25·69	...	28·22	22·38	25·81	20·41	22·86
192	Goods . . „	1st half	*12·70	15·00	12·00	10·87	...	9·57	11·78	9·75	10·16	10·81
		2nd „	*12·00	15·00	14·00	10·87	...	12·40	11·76	10·13	10·23	10·81
193	Mixed . . . „	1st half	18·00	14·30	14·00	17·31	12·08	17·11	15·75	15·89	14·76	13·85
		2nd „	17·40	14·30	15·00	17·31	12·50	19·12	16·04	16·43	14·54	13·85
	FROM APPENDIX II.											
194	Average mileage *per diem* of coaching vehicles, including brakes . . . . *Miles*	1st half	264,104	44,636	8,584	105,944	667	95,537	268,060	221,425	78,164	15,953
		2nd „	275,421	45,209	9,304	101,399	532	92,475	271,645	235,371	73,800	15,664
195	Goods ditto ditto „	1st half	948,962	67,660	4,928	184,592	1,174	149,365	521,328	290,960	136,250	55,243
		2nd „	846,777	1,12,155	13,055	147,027	723	128,442	457,293	491,805	96,480	49,626
	FROM APPENDIX V.											
	Average age of sleepers—									‖	¶	
196	Wood . . . . *Years*	1st half	11·38	8·50	12·49	7·96	2·50	10·06	8·06	17·00	8·24	15·00
		2nd „	10·94	8·50	12·87	8·31	3·00	10·37	8·32	17·00	8·44	...
197	Iron . . . . „	1st half	†10·20	8·50	...	‡8·17	...	16·38	13·90	12·25	12·43	19·00
		2nd „	†9·89	9·00	...	‡8·66	...	15·88	13·92	12·75	12·88	...
	Percentage of removals—											
198	Wood . . . *Per cent.*	1st half	4·64	7·57	3·06	2·64	...	0·16	1·58	5·17	4·35	11·26
		2nd „	3·94	2·57	0·93	0·69	...	0·16	3·38	5·76	3·95	...
199	Iron . . . . „	1st half	1·50	2·26	...	1·43	...	4·22	5·48	0·10	0·59	1·51
		2nd „	1·95	0·49	...	0·26	...	5·84	4·61	0·17	11·03	...

* The through speed of express goods trains is 17·10 miles per hour.
† Denham Oilperts' sleepers only. ‡ Total Iron and steel sleepers. ‖ Indian Midland railway only.
¶ Bombay, Baroda and Central India railway only.

DIX 46—*concluded.*

(by systems) during each half-year of 1902—concld.

AS APPENDICES TO THE ANALYSIS.

prepared by the railways not shown.

10 (*a*) to (*c*)	2 (*b*) to (*d*)	14	16	17 (*a*) & (*b*)	8 (*g*) to (*k*)	18	19	20	9 (*c*)	21	22	23	Gauge. Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junágad-Porbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
							3' 3⅜"							
232	114	37	169	30	433	40	3	29	35	215	203	202	1st half	180
249	115	41	175	30	438	44	3	28	43	230	199	205	2nd ,,	
65·15	66·21	57·94	82·57	74·85	51·29	70·39	50·29	54·86	73·55	51·73	51·18	63·20	1st half	181
62·79	67·44	66·22	73·11	67·99	41·82	59·98	52·10	48·37	54·94	47·67	54·72	60·79	2nd ,,	
													1st half	182
													2nd ,,	
45·68	32·58	31·80	31·09	...	35·66	36·39	31·93	29·52	36·56	31·01	28·83	34·91	1st half	183
46·76	35·96	34·67	29·50	...	33·39	34·64	29·64	25·07	35·61	32·43	29·04	32·22	2nd ,,	
													1st half	184
													2nd ,,	
...	...	...	...		...	...	...	...	...		...	...	1st half	185
...	...	...	...		...	...	...	...	...		...	...	2nd ,,	
...	...	...	...	67·40	...	...	...	...	...	74·48	...	...	1st half	186
...	...	...	...	62·33	...	...	...	...	...	75·14	...	...	2nd ,,	
...	...	...	...		...	...	...	...	...		...	...	1st half	187
...	...	...	...		...	...	...	...	...		...	...	2nd ,,	
149·75	113·84	153·20	142·35	§	107·64	136·16	...	76·64	104·56	88·40	80·45	122·35	1st half	188
147·07	88·45	123·51	133·22	§	103·10	81·81	...	73·42	116·58	95·81	79·42	132·56	2nd ,,	
350·13	227·47	91·10	164·46	§	251·86	173·09	...	173·19	166·30	280·22	156·81	178·30	1st half	189
320·79	247·88	105·46	147·78	§	242·04	150·21	...	173·54	161·31	273·18	134·46	175·56	2nd ,,	
312·41	132·82	170·39	156·03	§	142·28	122·65	173·68	146·91	147·16	204·86	156·01	166·74	1st half	190
254·61	129·46	188·92	136·15	§	137·07	107·69	148·55	137·89	139·76	206·60	154·63	174·40	2nd ,,	
21·29	19·28	...	17·00	...	19·24	...	...	20·51	...	16·41	18·00	18·24	1st half	191
21·25	19·28	...	17·00	...	19·35	...	...	20·53	...	16·41	18·00	18·24	2nd ,,	
10·23	11·16	...	9·50	9·98	9·31	10·52	...	10·89	9·80	7·32	9·50	11·05	1st half	192
9·09	11·16	...	9·50	9·98	9·22	10·38	...	10·96	9·80	7·32	9·50	11·05	2nd ,,	
10·27	12·50	11·62	12·10	12·96	14·55	12·84	14·76	11·82	12·42	11·63	12·00	12·71	1st half	193
10·27	12·50	11·62	12·10	15·10	14·40	12·67	14·76	11·64	14·07	11·63	12·00	12·71	2nd ,,	
87,218	46,909	22,562	109,565	14,353	142,541	23,133	1,813	18,107	14,685	71,215	94,269	97,942	1st half	194
87,134	50,223	22,795	107,672	15,211	149,805	24,574	1,951	17,608	20,434	75,804	100,491	91,502	2nd ,,	
180,195	83,455	18,150	170,801	26,239	455,517	39,423	1,806	18,662	28,263	141,557	96,375	162,094	1st half	195
154,597	101,989	28,354	123,762	19,749	291,343	24,081	1,219	11,473	23,026	133,576	91,100	135,353	2nd ,,	
*			‡			‖					††			
3·57	12·00	...	9·68	10·72	9·50	¶3·50	5·99	11·49	...	12·50	12·37	11·28	1st half	196
4·00	11·50	...	1·03	10·78	9·50	¶9·00	...	11·92	...	12·50	12·51	11·61	2nd ,,	
29·70	†15·00	...	...	...	†15·50	...	...	**12·21	...	**14·50	15·81	6·36	1st half	197
30·06	†15·00	...	...	...	†16·00	...	...	...	1·00	**15·00	14·17	6·86	2nd ,,	
1·22	2·57	0·46	1·60	1·83	4·62	¶0·19	0·23	1·94	0·11	1·81	7·28	1·37	1st half	198
1·36	3·96	0·62	1·14	3·99	5·30	¶0·52	0·12	0·61	0·13	2·12	1·63	1·38	2nd ,,	
0·23	†26·50	...	...	...	†1·09	...	...	0·02	¶0·10	**0·48	0·24	...	1st half	199
0·18	†3·80	...	...	...	†0·20	...	...	...	...	**1·75	0·19	...	2nd ,,	

* Excludes North East line.
† Total Iron and steel.
‡ Bengal and North-Western (Company's section) only.
§ Information not furnished.
‖ Jodhpur railway only.
¶ Total wood and steel sleepers.
** Steel sleepers.
†† South Indian railway only.

HISTORY

OF

OPEN LINES OF RAILWAYS AND OF LINES UNDER CONSTRUCTION OR SANCTIONED FOR COMMENCEMENT ON THE 31ST DECEMBER 1902, ALPHABETICALLY ARRANGED.

NOTE.—*For particulars relating to railways under survey or projected, see the "Histories of Railway Projects corrected up to the 30th June" each year, which is issued as a separate publication by the Government of India.*

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class : No. Main	Class : No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
11	(a)	**AGRA-DELHI CHORD—** *(5′ 6″ gauge.)*				
		Agra to Delhi	15-9-98	*1-4-04	121·16	
		TOTAL, AGRA-DELHI CHORD .	...	...	...	121·16
8	(o)	**AHMEDABAD-DHOLKA—** (*See* Bombay, Baroda and Central India system, page 288).				
8	(i)	**AHMEDABAD-PARANTIJ—** (*See* Bombay, Baroda and Central India system, page 286.)				
7	(c)	**AMRAOTI—** (*See* Great Indian Peninsula system, page 330.)				

* Probable date of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
14	(*a*)	**ASSAM-BENGAL SYSTEM—** (*3′ 3⅜″ gauge.*)				
		Main line—				
		Chittagong Port to Chittagong		3-11-95	1·73	
		Chittagong to Feni		1-7-95	56·90	
		Feni to Comilla		1-7-95	39·10	
		Comilla to Akhaura		1-1-96	29·41	
		Akhaura to Karimganj *	28-5-91	*4-12-96	115·00	
		Karimganj to Badarpur*		*4-12-96	12·00	
		Badarpur to Damchara		23-4-99	18·50	
		Lumding to Nazira		1-1-01	142·20	
		Nazira to Lakwa		15-11-01	10·75	
		Total Main line	...	...	...	425·59
		Branches—				
		Laksam to Chandpur		1-7-95	31·62	
		Badarpur to Katta Khal		13-6-98	6·27	
		Katta Khal to Silchar		8-11-98	12·35	
		Gauhati to Gauhati Ghât*		*1-1-00	1·22	
		Gauhati to Jamuna Mukh*	28-5-91	*1-1-97	74·50	
		Jamuna Mukh to Lanka‡		‡2-1-99	19·35	
		Lanka to Lumding (temporary station)		1-3-99	15·21	
		Lumding (temporary station) to Lumding		20-2-00	3·10	
		Total Branches	...	...	...	163·62
		TOTAL OPEN MILEAGE, ASSAM-BENGAL	...	...	...	589·21
		Lines under construction or sanctioned for construction—				
		ASSAM-BENGAL—				
		Damchara to Lumding	28-5-91	†1-10-03	§100·74	
		Lakwa to Bhojo	28-5-91	1-2-03	12·75	
		Bhojo to Tinsukia		1-3-03	41·75	
14	(*b*)	NOAKHALI (BENGAL)—				
		Laksam to Noakhali	6-4-01	15-5-03	30·00	
		Noakhali to Ichakhali		†30-6-04	4·95	
		Total Lines under construction	...	...	...	190·19
		GRAND TOTAL, ASSAM-BENGAL SYSTEM	...	...	...	779·40

* Closed for repairs after the earthquake of 12th June 1897 and

Akhaura to Srimangal	. . . .
Srimangal to Kalaura	. . . .
Kalaura to Karimganj	. . . .
Karimganj to Badarpur	. . . .
Gauhati to Gauhati Ghat	. . . .
Gauhati to Jamuna Mukh	. . . .

† Probable dates of opening.

‡ Owing to the bad state of the road due to excessive rains, this length was closed for public traffic on

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Assam-Bengal railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Assam-Bengal railway (3′ 3⅜″ gauge)	589·21	155·24	744·45
(*b*) *Noakhali (Bengal) railway (3′ 3⅜″ gauge)* . . .	...	34·95	34·95
Total .	589·21	190·19	779·40

2. **Assam-Bengal railway.**—

(*a*) The Assam-Bengal railway is worked under the following contract :—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

(*b*) The general conditions of the contract are as follows :—

(i) *Government aid.*—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £ 1,500,000. Land was provided free of charge.

(ii) *Terms of contract.*—The contract provides that the Company raise £1,500,000, and that any further money required, be either supplied by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of moneys paid against interest on the Company's share capital and sums applied from net earnings), are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

(iii) *Currency of contract.*—Government may determine the contract, by giving 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or the line is worked at a loss. On the determination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

the equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than $\frac{8}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital;

the equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceed $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and

the residue to Government and the Company in the ratio of their respective capital expenditure.

(vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vii) *General remarks.*—As it was considered that railway communication with Bengal and Assam was a matter of urgency, the construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was subsequently formed in England in April 1892 and absorbed the Assam-Bengal State railway.

3. **Noakhali (Bengal) railway.**—

(*a*) The Noakhali (Bengal) railway is worked under the following contracts :—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

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reopened as follows :—

. 20-7-97
. 24-7-97
. 8-8-97
. 18-10-97
. 2-1-99
. 2-1-99

and from 2nd October 1899 and re-opened on and from 1st January 1900.

§ Of this, 3·43 miles will be laid with double track.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		ASSAM-BENGAL SYSTEM—*concluded.*				
10	(*f*)	**AZHIKAL-MANGALORE**— (*See* Madras system, page 350.)				

REMARKS.
3. Noakhali (Bengal) railway—*concluded.*
(*b*) The general conditions of the contracts are as follows:—
(i) *Government aid.*—If the net earnings in any half-year are less than Rs. 30,000, Government allow as rebate a sum not exceeding one-half of the gross earnings of such half-year of the Assam-Bengal railway from interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs. 30,000. Land also has been provided free of charge.
(ii) *Terms of contract.*—The Company's share or stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency; but the Company can raise money at a reasonable rate of interest for *bonâ-fide* temporary purposes.
(iii) *Currency of contract.*—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fail to comply with their obligations under the contract. The Secretary of State may, by giving twelve months' notice, determine the contract, either on the 31st December 1902 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding, provided that the amount so payable shall not exceed by more than 20 per cent. the balance on the Capital Account of the Company, or be less than such balance.
(iv) *Terms of working.*—The gross earnings are to be applied in payment—
(1) to the credit of the Provident Institution of the Assam-Bengal railway of a sum equal to one-half of 1 per cent. of the total gross earnings;
(2) of Rs. 25 per mile open per week of the new railway maintainable by the Company; and of Rs. 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; and
(3) of all moneys paid or payable to the Secretary of State for the supervision of such mileage during such half-year;
the residue to be paid over to the Company as the net earnings of the new railway.
(v) *Rates and fares.*—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.
4. Details of construction—
(*a*) *Permanent-way.*—The line is laid with 50lb. flat-footed steel rails on sâl and pyinkado and partly on bastard sal, Ungeshur and Jara wood sleepers.
(*b*) *Ballast.*—The ballast consists of broken brick, stone and laterite.
(*c*) *Tunnels.*—The following are the tunnels of 500 feet length and over:—tunnel between Bihara and Damchara, 671 feet; tunnel between Harangajao and Jatinga, 596 feet; tunnel between Harangajao and Jatinga, 815 feet; tunnel between Harangajao and Jatinga, 843 feet; tunnel between Hasanghaju and Nerebangala, 1,907 feet; tunnel between Hasanghaju and Nerebangala, 500 feet; tunnel between Hasanghaju and Nerebangala, 880 feet; and tunnel between Mupa and Langting, 760 feet. There are 14 other tunnels, varying from 136 feet to 487 feet in length, aggregating 4,583 feet. There are 30 tunnels in all including cut and covers on the railway.
(*d*) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Barak (between Badarpur and Bihera), 8 spans of 60 feet; 1 span of 276 feet; 1 span of 250 feet and 1 span of 224 feet (1,368 feet); Kopili (between Jagiroad and Dharamtul), 1,380 feet; and Dibing (between Naharkatiya and Bordubi), 1,050 feet. Besides these there are many high viaducts on the Hill section.
(*e*) *Fencing.*—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghât and Gauhati and half a mile from Gauhati towards Lumding.
(*f*) *Curves.*—On the Hill section the curves vary from 477 feet to 955 feet in radius. On the rest of the line, there are no curves under a radius of 1,000 feet.
(*g*) *Gradients.*—Of a total open mileage on the system of 589·21 miles, 0·57 mile is on the ruling gradient of 1 in 65.

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
25	(*a*)	**BARSI LIGHT—** (*2′ 6″ gauge.*)				
		Barsi Junction to the town of Barsi	1-8-95	1-3-97	21·59	
		TOTAL, OPEN MILEAGE .				21·59
		Lines under construction or sanctioned for construction—				
		Barsi Junction to Pandharpur	6-1-98	} ... {	30·67	
		Barsi town to Tadwala	29-11-00	} ... {	26·70	
		Total, Lines under construction .				57·37
		TOTAL, BARSI LIGHT .				78·96
21	(*i*)	**BELLARY-RAYADRUG—** (*See* Southern Mahratta system, page 396.)				

on the 31st December 1902, alphabetically arranged.

	Remarks.
1. Barsi Light railway—	
(*a*) The Barsi Light railway is worked under the following contracts:—	
Contract of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Junction to Barsi town.	
26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.	
(*b*) The general conditions of the contracts are as follows:—	
(i) *Government aid.*—The Company is allowed the use of part of the road between Barsi Town and Barsi Junction station only. Land is provided free for the extensions.	
(ii) *Currency of contracts.*—Government may determine the contract on the 1st January 1924, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.	
(iii) *Power of Company to surrender contracts.*—Nil.	
(iv) *Terms of working.*—The line is worked by the owning Company.	
(v) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.	
(vi) *General remarks.*—The extensions from Barsi Junction to Pandharpur and Barsi Town to Tadwala were sanctioned by the Secretary of State on the 6th January 1898 and 29th November 1900, respectively. Only the earthwork has been thrown up, as a famine work.	
2. Details of construction—	
(*a*) *Permanent-way.*—Steel flat-footed rails, 35 lb. to the yard, on steel sleepers.	
(*b*) *Ballast.*—Partly of broken stone and partly of hard moorum.	
(*c*) *Fencing.*—An efficient fencing is provided for a short distance on either side of level crossings, at bridges and round Barsi Junction and Barsi Town stations.	
(*d*) *Curves.*—There are four curves of less than 1,000 feet radius.	
(*e*) *Gradients.*—Of a total open mileage of 21·59 miles, 0·61 mile is on the ruling gradient of 1 in 90.	

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BENGAL AND NORTH-WESTERN SYSTEM— (*3′ 3⅜″ gauge.*)			Miles.	Miles.
16	(*a*)	COMPANY'S SECTION—				
		Main line—				
		Sonepur to Mankapur	18-5-82	15-1-85	218·50	
		Mankapur to Nawabganj		2-4-84	14·00	
		Nawabganj to Ajodhya		1-12-84	6·10	
					238·60	
		Loop line—				
		Sonepur to Bunwarchak	18-5-82	15-1-85	9·34	
		Total Main and Loop lines	...	...	...	247·94
		Branches—				
		Uska Bazar branch—				
		Gorakhpur to Uska Bazar	3-8-85	15-12-86	39·58	
		Naipalganj Road branch—				
		Mankapur to Bahraich	18-5-82	2-4-84	55·00	
		Bahraich to Naipalganj Road		15-12-86	33·98	
					88·98	
		*Revelganj branch**—				
		Chupra to Revelganj	Nov. 1889	15-4-91	7·34	
		Revelganj to Manjhi Ghât	...	1-4-99	3·71	
					11·05	
		*Bahramghat branch**—				
		Gonda to Colonelganj	Nov. 1889	29-10-91	17·75	
		Colonelganj to Jarwal Road		1-2-92	10·30	
					28·05	
		*Burhwal branch**—				
		Jarwal Road to the west bank of the Gogra river	10-1-95	18-12-96	2·63	
		Gograghat to Ganeshpur		24-12-98	3·27	
		Chawkaghat to Burhwal		24-11-96	4·12	
					10·02	
		*Tulsipur branch**—				
		Gonda to Balrampur	10-1-95	15-12-96	22·00	
		Balrampur to Tulsipur		1-6-98	19·00	
					41·00	
		*Katarnian ghât branch**—				
		Nanpara to Mohinpurwa	10-1-95	15-12-96	15·00	
		Mohinpurwa to Katarnian ghât		25-3-98	27·08	
					42·08	
		*Turtipur branch**—				
		Bhatni to Turtipur	10-1-95	15-12-96	17·14	
		Salimpur to Barhaj		1-12-97	12·77	
					29·91	
		Ganges-Gogra Doab lines†—				
		Turtipur to Mau	...	8-6-98	28·95	
		Mau to Benares	...	15-3-99	58·06	
		Mau to Azamgarh	...	8-6-98	27·15	
		Kopaganj Road to Ballia	...	15-3-99	37·61	
		Ballia to Chand-Deara Ghât	...	12-5-99	29·06	
		Aunrihar to Ghazipur	...	15-3-99	28·37	
					209·14	
		Total Branches	...	...	...	499·81
		TOTAL OPEN MILEAGE, COMPANY'S SECTION	...	...	...	747·75
		Carried over	...	...	...	747·75

* † Refer to passages under "Remarks," see opposite page.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Bengal and North-Western railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)	538·61	...	538·61
(*b*) Ganges-Gogra Doab extensions (3′ 3⅜″ gauge)	209·14	102·11	311·25
(*c*) Tirhoot State railway (3′ 3⅜″ gauge)	516·89	30·47	547·36
(*d*) Sagauli-Raxaul railway (3′ 3⅜″ gauge)	18·09	...	18·09
Total	1,282·73	132·58	1,415·31

2. **Bengal and North-Western and Tirhoot State railways—**

(*a*) The Bengal and North-Western and Tirhoot State railways are worked under the following contracts :—

Contracts of—12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

18th July 1890.—Contract for the taking over and working of the Tirhoot State railway.

19th December 1894.—Contract supplemental to those of 1882, 1886 and 1890, providing for the extensions marked* (on the opposite page) of the Company's railway and for the exercise of running powers over the metre gauge (3′ 3⅜″) link from Burhwal to Cawnpore.

12th December 1895.—Contract modifying that of 1890.

23rd July 1896.—Contract supplemental to those of 1882, 1886, 1890, 1894 and 1895, known as the Ganges-Gogra Doab contract, for the extensions marked† (on the opposite page) of the Company's railway.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Land alone was provided free of charge.

(ii) *Currency of contracts.*—

Bengal and North-Western railway contract.—The contracts of 1882, 1886 and 1894, *viz.*, those for the working of the Bengal and North-Western railway proper are current for a period of 99 years and terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, moveable machinery, stores, etc. Government may, however, determine the contract after 30 years (*i.e.*, on the 31st December 1912) or 50 years (*i.e.*, on the 31st December 1932) on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government *would have been* entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, at six months' notice if the Company fail to observe their obligations, on paying the value of rolling-stock, stores, etc., and fair value of line, less value of same treated as a reversionary sum absolutely payable on the 31st December 1981.

Ganges-Gogra Doab contract.—The contract of 1896, *viz.*, that covering the Ganges-Gogra Doab lines (marked †) runs concurrently with those of 1882, 1886 and 1894, but in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line as shown in sterling only, without any premium.

Tirhoot State railway contract.—The contract of 1890, *viz.*, that for working the Tirhoot State railway, terminates on the 31st December 1904. If the original contract with the Company, dated the 12th December 1882, terminates for any reason prior to the expiry of the term of the Tirhoot contract, the latter also, *ipso facto*, terminates at the same time. Government may also terminate the contract at any time after six months' notice, if the Company fail to observe their obligations. On the determination of the contract, Government resumes possession of the State railway. Any capital sums which may have been raised by Government, and expended on the Company's lines, or which may have been raised and expended by the Company on the State railway, shall be considered as debt due from the Company and Government, respectively.

(iii) ***Power of Company to surrender contracts.***—Nil.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BENGAL AND NORTH-WESTERN SYSTEM–*contd.*			Miles.	Miles.
		Brought forward	...	...	...	747·75
16	(*a*)	*Lines under construction or sanctioned for construction—*				
		Ganges-Gogra Doab lines—				
		Azamgarh to Shahganj†	18-5-97	14-2-03	34·81	
		Phepna to Ghazipur†	23-12-01	10-3-03	31·16	
		Aunrihar-Jaunpur†	1-11-02	...	36·14	
		Total Lines under construction, Company's section.	...	...	...	102·11
		GRAND TOTAL, COMPANY'S SECTION	...	...	...	849·86
16	(*b*)	TIRHOOT STATE RAILWAY SECTION—				
		Main line—				
		Semaria ghât to Dalsinghsarai	3-2-82	1-5-83	22·55	
		Dalsinghsarai to Samastipur	Feb. '74	1-11-75	14·75	
		Samastipur to Mozufferpur	6-1-76	24-2-77	29·79	
		Mozufferpur to Motiharee	8-7-80	1-2-83	49·57	
		Motiharee to Bettiah		20-12-83	27·00	
		Samastipur to Durbhanga	Feb. '74	1-11-75	23·00	
		Durbhanga to Jhanjharpur	8-7-80	1-2-83	24·00	
		Jhanjharpur to Ghoghardiha	19-10-83	8-4-86	13·00	
		Ghoghardiha to Nirmala	16-2-85	8-4-86	6·92	
		Nirmala to Bhaptiahi		15-11-87	10·00	
		Bhaptiahi to Pratapganj		1-10-88	14·00	
		Pratapganj to Khandwa ghât	...	14-11-90	8·00	
		Total Main line	...	...	...	242·58
		Branches—				
		Bairagnia branch—				
		Durbhanga to Sitamarhi	...	1-7-90	42·00	
		Sitamarhi to Riga	...	1-1-91	6·00	
		Riga to Dheng	...	1-7-91	9·00	
		Dheng to Bairagnia (*fair weather line*)	23-10-91	1-3-92	3·51	
					60·51	
		Sonepore branch—				
		Mozufferpore to Hajeepore	6-2-83	26-10-84	31·25	
		Hajeepore to Sonepore	19-10-83	1-8-87	3·36	
					34·61	
		Hajeepore branch—				
		Hajeepore to Hajeepore ghât	...	26-10-84	1·89	
		Hajeepore branch loop line	...	2-11-00	3·31	
					5·20	
		Hajeepore-Katihar extension—				
		Hajeepore to Bachhwara	...	1-4-00	44·46	
		Barauni Junction to Thana Bihpur	...	1-3-00	66·17	
		Thana Bihpur to Katareah	...	7-3-01	17·50	
		Katareah to Kursela (Kosi bridge and approaches)	...	10-7-02	3·75	
		Kursela to Katihar	...	7-3-01	23·75	
		Bhagalpur branch—				
		Thana Bihpur to Barari Ghât	...	16-12-01	11·36	
					155·63	
		Monghyr branch—				
		Sahebpore Kamal to Monghyr Ghât	...	7-3-00	7·00	
		Total Branches	...	...	...	274·31
		TOTAL OPEN MILEAGE, TIRHOOT STATE RAILWAY SECTION	...	...	...	516·89
		Line under construction or sanctioned for construction—				
		Jainagar branch—				
		Sakri to Jainagar	1-6-99	*	30·47	
		Total Line under construction, Tirhoot section	...	...	...	30·47
		GRAND TOTAL, TIRHOOT STATE RAILWAY SECTION.	...	...	...	547·36
16	(*c*)	SAGAULI-RAXAUL—				
		Sagauli to Raxaul	...	1-3-99	18·09	18·09
		GRAND TOTAL, BENGAL AND NORTH-WESTERN SYSTEM	...	...	...	1,415·31

* Commencement of work not yet authorised.
† Refers to passage under "Remarks" on preceding page.

	REMARKS.

2. Bengal and North-Western and Tirhoot State railways—*continued.*

(*b*) General conditions—*concluded.*

(iv) *Terms of working.*—The Company's railway and the Tirhoot State railway are worked as one concern, a joint account of working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of the open system in each half-year, and payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) and net earnings being kept, the latter being applied in the order stated—

In payment of any further contribution (beyond that chargeable to working expenses) to the Company's Provident Institution;

In payment of interest at 4 per cent. on Rs. 5,17,12,781, being the capital raised and expended by the Company;

In payment of interest at 4 per cent. on Rs. 4,58,49,640, being the capital supplied by Government; and

In payment of the residue to Government and the Company in the ratio of their respective shares of capital, subject to the further payment to the Company of 5 per cent. of the Government's share of the residue as compensation for working the Tirhoot State railway for Government.

(v) *Rates and fares.*—On the Company's section, the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section, certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks.*—The Bengal and North-Western railway has direct communication with the railway system of India at only three points on its system, *viz.*, at Burhwal, Benares and Katihar. At all other points, communication is interrupted by rivers. Communication across the Ganges is maintained with the East Indian railway at the following ferries: between Ghazipur and Tarighât (ordinary steam ferry); between Palezaghât and Digha Ghât (ordinary steam ferry); between Semaria Ghât and Mokameh Ghât (wagon ferry); and between Barari Ghât and Bhagalpur Ghât (wagon ferry). Eventually a branch between Bhagalpur Ghât and the East Indian railway at Bhagalpur will connect the Bengal and North-Western and East Indian railways *vid* the Bhagalpur ferry. Between Khanwa Ghât on the Kosi extension of the Tirhoot State railway and Anchara Ghât on the Kosi branch of the Eastern Bengal State railway, there is a country boat ferry worked by the Eastern Bengal State railway. There is a bridge-of-boats between Ajodhya and Ajodhya Ghât during the dry weather months, but during the rains this bridge is removed and replaced by a steam ferry. The Tirhoot State railway was worked by State agency until 1890, when it was leased to the Bengal and North-Western Railway Company.

3. Sagauli-Raxaul railway—

(*a*) The Sagauli-Raxaul railway is worked under the following contracts:—

Contracts of—31st October 1896 (between the Secretary of State and the Sagauli-Raxaul Railway Company) for construction and working.

5th June 1899 (between the Secretary of State and the Bengal and North-Western Railway Company) for working and maintenance of the Sagauli-Raxaul railway.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Land alone was provided free of charge.

(ii) *Currency of contract.*—Government may determine the contract either on the 31st December 1917 or on the 31st December in the last year of any subsequent period of 10 years, paying 25 times the average net earnings for the three years preceding the purchase.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Forty per cent. of the gross earnings to be retained by the Bengal and North-Western Railway Company for working and maintenance (which include any single item of capital expenditure not exceeding Rs. 200 classed as a Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and 10 per cent. for supervision on the cost of Government works at Sagauli. The balance is payable to the Branch Company.

(v) *Rates and fares.*—To be arranged between Government and the Company within the maxima and minima in force on the Tirhoot section.

4. General Remarks.—The Bengal and North-Western railway has running powers over the following sections of foreign lines:—

Cawnpore-Burhwal, 3′ 3⅜″ gauge link, 79·60 miles; 1·81 miles of 3′ 3⅜″ gauge track of the Oudh and Rohilkhand railway from Benares Cantonment to Benares City, and 3·66 miles of the Lucknow-Bareilly State railway between Daliganj and Aishbagh.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BENGAL AND NORTH-WESTERN SYSTEM— *concld.*				

on the 31st December 1902, alphabetically arranged.

	Remarks.
5. Details of construction—	
(*a*) *Permanent-way*—	
Company's section.—The main line between Sonepur and Burhwal is laid with 50 lb. steel rails on sâl sleepers. The rest of the line north of the Gogra is laid with 41¼ lb. steel rails and mostly sâl sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihar-Ghazipur branch, which is laid with 50 lb. steel rails, is laid with 41¼ lb. steel rails on sâl sleepers.	
Tirhoot section.—Between Barauni and Mozufferpur, the line was originally laid with 41¼ lb. steel rails on sâl sleepers; it has been relaid with 50 lb. rails. The section between Sonepur and Mozufferpur which was also originally laid with 41¼ lb. steel rails is being renewed with steel rails of 50 lb. section. The section between Samastipur and Durbhanga originally laid with 41¼ lb. steel rails, has partly been relaid with 50 lb. steel rails. There are still about 15 miles of 41¼ lb. rails on this section. The remainder of the line is laid partly with 41¼ lb. steel rails, partly with 50 lb. iron rails, the latter being entirely on the Bairagnia branch. The 50 lb. iron rails are laid on sâl sleepers, and the remainder partly on sâl and pyinkado and partly on Denham Olphert's iron sleepers. The Hajipur-Katihar extension is laid with 50 lb. steel rails on sâl and pyinkado sleepers.	
Sagauli-Raxaul branch.—The permanent-way consists of 41¼ lb. steel rails on sâl sleepers.	
(*b*) *Ballast.*—The system is ballasted throughout.	
(*c*) *Bridges.*—The important bridges of 1,000 feet length and over are as follows: Rapti (between Jagat Bela and Sahjanwa), 9 spans of 150 feet (1,445 feet); Elgin (between Gograghat and Ganeshpur), 17 spans of 200 feet (3,695 feet including abutments); Turtipur* (between Mathuri and Bilthara Road), 18 spans of 200 feet; Gunduck (between Hajeepore and Sonepore), 8 spans of 250 feet (2,176 feet); and Kosi (between Katareah and Kursela), 15 spans of 200 feet (3,172·60 feet).	
(*d*) *Fencing.*—The Company's section was originally unfenced except in front of villages and at level crossings and near stations, but the main line is in course of being fenced, and about 150 miles have been done. The Tirhoot section, excluding the Hajipur-Katihar extension, is fenced throughout. On the Hajipur-Katihar extension, the section between Hajipur and Khagaria is being fenced, but between Khagaria and Kursela it is unfenced. The Sagauli-Raxaul branch is unfenced.	
(*e*) *Curves.*—On the Company's section, there is only one curve under a radius of 1,000 feet, *viz.*, at Paleza Ghât on the loop line, the length of which is 2,000 feet and radius 900 feet. There are no curves under a radius of 1,000 feet on the Tirhoot section and on the Sagauli-Raxaul branch.	
(*f*) *Gradients.*—Of a total open mileage of 1,282·73 miles on the system, 3·42 miles are on the ruling gradient of 1 in 200.	

* Opened for traffic on the 15th January 1903.

P. T. O.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
3	(*a*)	**BENGAL CENTRAL—** *(5′ 6″ gauge.)*				
		Main line—				
		Dum-Dum Junction to Dattapukur	Mar. 1881	2-4-83	14·25	
		Dattapukur to Gobardanga		7-12-83	17·00	
		Gobardanga to Bongong		22-4-84	12·00	
		Bongong to Khoolna		16-2-84	61·26	
		Total Main line .	...	...	...	104·51
		Branch—				
		Ranaghat to Bongong	March 1881	16-10-82	20·50	
		Total Branch .	...	...	...	20·50
		TOTAL, BENGAL CENTRAL .	...	...	...	125·01

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Bengal Central railway—

(*a*) The Bengal Central railway is worked under the following contracts:—

Contracts of—26th July 1881.—Bengal Central railway's principal contract with the Secretary of State.
5th January 1887.—Contract with the Secretary of State for the construction and working of the Bengal Central railway and for future extensions.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government guarantee interest at 3½ per cent. in sterling on the Company's share capital for term of contract. Land also was provided free of charge.

Under the original contract (1881), the Company was to receive no financial assistance from the Government beyond the payment of interest on capital during construction (the amount so paid, however, being repayable by the Company, with interest, out of surplus profits after the line had been opened). This contract was superseded by that of 1887.

(ii) *Currency of contract.*—The contract will remain in force until the 31st December 1980. Government may, however, determine it on the 30th June 1905 or any succeeding 10th year on twelve months' notice, or on six months' notice at any time if the Company fail to observe their obligations or the line is worked at a loss. On the determination of the contract by efflux of time or by notice, the Government are to pay the Company the amount of the par value of the share capital paid to Government.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings, after providing for repayment to Government of interest (if any) on moneys that may be raised by debentures in excess of the original capital of £ 1,000,000, are divided in proportion of three-fourths to the Secretary of State and one-fourth to the Company.

(v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks.*—The line was worked for the Company by the Eastern Bengal Railway Company from the 16th October 1882 to the 30th June 1884 and then by the Eastern Bengal State Railway Administration until the 1st January 1897, on which latter date the Company itself took over the working.

2. General remarks.—The Bengal Central railway has running powers over the following portions of the Eastern Bengal State railway: Dum-Dum Junction to Canal Junction, 1·61 miles; Canal Junction to Calcutta, 2·96 miles; Canal Junction to Chitpore, 2·00 miles; and Calcutta to Kidderpore Docks, 7·31 miles.

3. Details of construction—

(*a*) *Permanent-way.*—The permanent-way consists of flat-footed steel rails of the Vignole section, 62 lb. to the yard, laid on sleepers of creosoted pine. Sâl sleepers are now being used for renewals instead of creosoted pine, and in all curves sâl sleepers have been put in at the joints in place of creosoted pine sleepers, and they have also been put in at the middle of pairs of rails in some of the curves.

(*b*) *Ballast.*—At first the line was sand-ballasted, brick ballast, however, being used at bridges and level-crossings and in a few short lengths where the soil was bad; but it was subsequently decided to ballast the portion of the line between Dum-Dum Junction and Singhia, including sidings, with brick and this work is completed; also over curves and between Singhia and Khoolna where the earth, of which the embankment is composed, is not very good.

(*c*) *Fencing.*—The line is fenced throughout; iron gates are provided at level-crossings.

(*d*) *Curves.*—There are no curves under a radius of 1,000 feet.

(*e*) *Gradients.*—Of a total length of 125·01 miles, 4·33 miles are on the ruling gradient of 1 in 400.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
12	(*a*)	BENGAL DOOARS— (*3′ 3⅜″ gauge.*)				
		Main line—				
		East Bank of the Teesta to Dam Dim	May 1891	15-1-93	31·00	
		Total Main line	...	...	...	31·00
		Branch—				
		Lataguri to Ramshaihat	May 1891	11-6-93	5·40	
		Total Branch	...	...	...	5·40
		TOTAL OPEN MILEAGE, BENGAL DOOARS	...	...	...	36·40
12	(*b*)	BENGAL DOOARS EXTENSIONS.				
		Main line—				
		Mal to Chalsa		1-4-01	5·20	
		Barnes Junction to Baura		20-4-00	28·30	
		Baura to Bhotemari	2-3-98	21-10-00	16·70	
		Bhotemari to Lalmonir Hât		20-11-00	20·80	
		Dam Dim to Oodlabari		1-5-01	3·30	
		Oodlabari to Bagrakote	2-3-98	1-1-02	3·46	
		TOTAL OPEN MILEAGE, BENGAL DOOARS EXTENSIONS	...	...	...	77·76
		GRAND TOTAL, OPEN MILEAGE, BENGAL DOOARS	...	...	...	114·16
		Lines under construction or sanctioned for construction—				
		Bengal Dooars extensions—				
		Chalsa to Chengmari	2-3-98	1-1-03	15·00	
		Chengmari to Dalgaon	2-3-98	23-3-03	14·00	
		Dalgaon to Madari Hât	2-3-98	*1-4-03	9·80	
		Total Lines under construction	...	...	...	38·80
		GRAND TOTAL, BENGAL DOOARS	...	...	...	152·96

* Probable date of opening.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Bengal Dooars railway—

(*a*) The Bengal Dooars railway is worked under the following contracts:—

Contracts of—27th April 1891.—Bengal Dooars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Malbazar-Hantupara extension).

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Land only was provided free of cost.

(ii) *Currency of contracts.*—On the 31st December 1919, and thereafter at intervals of seven years Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company, in the case of the main line, of one and two-fifths of the invested capital and capital liabilities, and, in the case of the extensions, of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If at any period the main line or extensions should not be worked for six consecutive months, the company can also be called upon to surrender the line and extensions on payment of the actual sum expended up to the date of notice.

(iii) *Terms of working.*—If worked by the Company, the whole of the profits go to the Company. If worked by the Eastern Bengal State railway, the Secretary of State retains each half-year 40 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of income tax payable to Government.

(iv) *Rates and fares—*

Main line and extensions, Malbazar to Hantupara and Dam Dim to Bagrakote—

Certain maxima and minima have been fixed subject to alteration from time to time. If gross receipts reach 12 per cent. on capital, Government may reduce maxima to the extent of 25 per cent., except certain special rates.

Extension from Barnes Junction to Lalmonir Hat—

Certain maxima and minima have been fixed within which charges can be made.

(v) *General remarks.*—The line was constructed for opening out the Western Dooars and for the development of the tea industry.

2. Details of construction.—

(*a*) *Permanent-way.*—The line has been laid with 41½ lb. flat-footed steel rails on sâl sleepers.

(*b*) *Ballast.*—The line is ballasted throughout with stone.

(*c*) *Fencing.*—The line is unfenced.

(*d*) *Curves.*—There are two curves with a radius of 955 feet, the lengths being 0·03 and 0·25 mile.

(*e*) *Gradients.*—Of a total open mileage of 114·16 miles, 1·59 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BENGAL-NAGPUR SYSTEM— *(5′ 6″ gauge.)*			Miles.	Miles.
4	(*a*)	COMPANY'S SECTION—				
		Main line—				
		Asansol to Damoodur	*12-9-84	12-6-89	5·10	
		Damoodur to Purulia		14-12-89	41·72	
		Purulia to Chakardharpore		22-1-90	72·25	
		Chakardharpore to Goilkera		15-5-90	21·06	
		Goilkera to Jharsuguda		1-2-91	105·09	
		Jharsuguda to Raigarh		20-4-90	44·35	
		Raigarh to Bilaspur		10-2-90	81·90	
		Bilaspur to Raipur.		10-1-89	68·35	
		Raipur to Raj-Nandgaon		4-12-88	41·99	
		Raj-Nandgaon to Nagpur		27-11-88	144·88	
		Total Main line	...	...	...	626·69
		Branches—				
		Sanctoria coal branch—				
		Damoodur to the Sanctoria collieries	12-9-84	12-6-89	7·03	
		Sambalpur branch—				
		Jharsuguda to Sambalpur	July 1891	1-2-93	30·23	
		Katni branch—				
		Bilaspur to Birsinghpur	12-9-84	1-2-91	142·60	
		Birsinghpur to Umaria		11-5-90	18·48	
		Umaria to Katni		2-11-86	35·88	
		Katni-Murwara junction line		...	1·98	
					198·94	
		Sini to Khargpur		1-6-98	99·50	
		Khargpur to Khal Bridge		17-12-98	34·53	
		Khal Bridge to Rajapur Khal		24-5-00	18·80	
		Rajapur Khal to Howrah		14-12-00	17·50	
					170·33	
		Santragachi to Shalimar		15-3-01	3·00	
		Hooghly foreshore to Kidderpore Docks	August 1895	10-4-01	0·60	
					3·60	
		Khargpur to Balasore		17-12-98	71·75	
		Balasore to Barang (Cuttack)		10-1-99	116·75	
					188·50	
		Kola riverside branch—				
		Rajapur Khal to Kola Riverside Station		17-12-98	1·00	
		Khargpur to Cossye river	January 1899	20-12-99	4·75	
		Right bank of the Cossye river to Midnapore		8-6-01	3·00	
					7·75	
		Total Branches	...	...	...	607·38
		TOTAL, COMPANY'S SECTION	...	...	...	1,234·07
		Double line—				
		Howrah to Santragachi	...	14-12-00	3·42	
		Santragachi to Bauria	...	17-6-02	9·69	
					13·11	
		Carried over	...	...	...	1,234·07

* Dates of sanction of original metre gauge lines : Nagpur to Dongargarh, 9th May 1878 and Dongargarh to Raj-Nandgaon, 15th March 1881.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Bengal-Nagpur railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Bengal-Nagpur railway	(5′ 6″ gauge)	1,234·07	176·90	1,410·97
(*b*) East Coast railway, Northern section	(5′ 6″ gauge)	311·93	...	311·93
(*c*) Raipur-Dhamtari railway	(2′ 6″ gauge)	56·24	...	56·24
(*d*) *Jubbulpore-Gondia extension*	(2′ 6″ gauge)	...	252·67	252·67
(*e*) Parlakimedi Light railway	(5′ 6″ gauge)	24·68	...	24·68
(*f*) *Moharbhanj* *	(2′ 6″ gauge)	...	28·50	28·50
	Total	1,626·92	458·07	2,084·99

2. **Bengal-Nagpur railway—**

(*a*) The Bengal-Nagpur railway system (excluding Parlakimedi Light railway) is worked under the following contracts :—

Contracts of—9th March 1887, Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Sambalpur Road station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2′ 6″ gauge) feeder line with a branch to Rajim; an extension (5′ 6″ gauge) from Sini *viâ* Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jherriah coal fields; a line (2′ 6″ gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Seoni, Seoni to Chindwara; and for the working of the Northern section of the East Coast State railway as part of the undertaking.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Government guarantee interest in sterling at 4 per cent. per annum on £3,000,000 share capital; on any further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon.

(ii) *Terms of contract.*—The contract provides for the Company raising £3,000,000, any further money required being either provided by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such period and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contract, all moneys raised by the Company become the absolute property of the Secretary of State.

(iii) *Currency of contract—*

Principal contract.—Government may determine the contract, by giving twelve months' previous notice, on the 31st December 1913, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations, or the line be worked at a loss. On the termination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid in by the Company.

Sambalpur branch contract.—The contract for this branch brings it within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895, on giving twelve months' notice.

Contract of 23rd January 1902: Northern section, East Coast State railway.—Government may at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances and without compensation in respect of such retransfer.

(iv) *Power of Company to surrender contract.*—Nil.

* Question of working agency not yet finally settled.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
4	(a)	**BENGAL-NAGPUR SYSTEM—*continued.***			Miles.	Miles.
		Brought forward	...	...	...	1,234·07
		EAST COAST RAILWAY, NORTHERN SECTION—				
		Main line—				
		Cuttack Road (Barang) to Bhubaneshwar	July 1890	1-2-97	10·32	
		Bhubaneshwar to Khurda Road		20-7-96	11·76	
		Khurda Road to Rambha		1-3-96	61·54	
		Rambha to Berhampur-Ganjam		1-9-95	29·56	
		Berhampur-Ganjam to Palasa		1-4-95	45·76	
		Palasa to Parlakimedi Road (Naupada)		17-12-94	33·11	
		Parlakimedi Road (Naupada) to Vizianagram		20-7-94	55·20	
		Vizianagram to Waltair		15-7-93	37·50	
		Total Main line	...	...	...	284·75
		Branches—				
		Puri branch—				
		Khurda Road to Puri	July 1895	1-2-97	25·34	
		Temporary Puri station to new Puri station		1-6-98	1·84	
		Total Branches	...	...	27·18	27·18
		Double line—				
		Simachellam Junction to Waltair station	20-12-02	12-12-02	4·24	
		TOTAL, EAST COAST RAILWAY, NORTHERN SECTION	...	...	...	311·93
4	(b)	RAIPUR-DHAMTARI— *(2′ 6″ gauge.)*				
		Main line—				
		Raipur to Kurud	3-5-97	10-9-00	31·50	
		Kurud to Dhamtari		17-12-00	14·24	
		Total Main line	...	...	...	45·74
		Branch—				
		Abhanpur to Rajim	...	15-10-00	10·50	
		Total Branch	...	...	...	10·50
		TOTAL, RAIPUR-DHAMTARI	...	...	...	56·24
4	(c)	PARLAKIMEDI LIGHT— *(2′ 6″ gauge.)*				
		Naupada to Parlakimedi	14-3-98	1-4-00	24·68	24·68
		TOTAL, OPEN MILEAGE, BENGAL-NAGPUR SYSTEM	...	...	...	1,626·92
		Lines under construction or sanctioned for construction—				
		COMPANY'S SECTION—				
		Midnapore to Bujudih	1-6-01	1-2-03	114·50	
		Bujudih to Hariharpur	9-12-01	...	27·90	
		Ramkanali to Chaurashi (Parbatpur)	17-7-01	1-2-03	4·67	
		Chaurashi to Nodeeha	17-7-01	* June 1903	4·81	
		Colliery lines—				
		Bhojudih to Parthadihi	9-12-01	...	1·45	
		Bhaga to Mhoda including the Bhaga connection		...	14·36	
		Bhojudih to Bhaga		20-4-03	7·00	
		Bhowra siding		...	1·50	
		Southern half of the Mulkeera-Katrasgarh cross connection.		...	0·71	
		Total Lines under construction, Company's section	...	...	...	176·90
		Carried over	...	...	...	176·90 1,626·92

* Probable date of opening.

	REMARKS.
2. **Bengal-Nagpur railway**—*continued.*	
	(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure up to Rs. 1,000 and not exceeding Rs. 2,000 at the discretion of the Consulting Engineer, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) three parts of the surplus profits for any complete calendar year after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between Government and the Company in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast railway, bear to the gross earnings of the latter section.
	(vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates. The Madras railway have the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltair. The Bengal-Nagpur railway have similarly power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.
	(vii) *General remarks.*—The Northern section of the East Coast State railway (an aggregate length of 311·93 miles) was transferred to the Bengal-Nagpur Railway Company on the 1st January 1901, to be incorporated in their undertaking as an integral part of it.
3. **Parlakimedi Light railway**—	
(*a*) The Parlakimedi Light railway is worked under—	*Agreement of*—14th April 1902 (between the Rajah of Parlakimedi and Bengal-Nagpur Railway Company) for working.
(*b*) The general conditions of the agreement are as follows :—	
	(i) *Government aid.*—The line is the property of the Rajah of Parlakimedi.
	(ii) *Currency of Agreement.*—The Agreement is current for one year from the 1st January 1902 and subject to revision thereafter.
	(iii) *Terms of working.*—The Company work the railway at actual cost, the net receipts or deficiency being payable to or by the Rajah as the case may be.
	(iv) *Rates and fares.*—To be fixed by the Company.
	(v) *General remarks.*—On the 20th May 1901 the Indian Railways Act, IX of 1890, except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.
4. **General remarks**—A length of 1·98 miles of this railway at Katni is worked over by the Great Indian Peninsula railway. The Bengal-Nagpur railway works over 0·30 mile of the East Indian railway at Katni, 0·50 mile at Asansol, 1·00 mile at Howrah and 0·65 mile of the Great Indian Peninsula railway at Nagpur; and has also running powers over the Waltair-Vizagapatam section (including the wharf and swamp lines) of the North-East line of the Madras railway.	
5. **Details of construction**—	
(*a*) *Permanent-way.*—On the main line the rails are 75 lb. steel, flat-footed, 30 feet long, laid on 10 transverse steel sleepers and two wooden sleepers per rail, except between Nagpur and Kamptee, where 12 steel sleepers per rail are used. On the Bilaspur-Umaria section, 75 lb. flat-footed steel rails are laid on 10 transverse steel sleepers and 2 sâl sleepers at the joints, except between Khongsara and Khodri, where steel sleepers 10 to the rail, are used. The Sambalpur branch is laid with the same type of permanent-way as on the main line, but no sâl sleepers have been added at rail joints. The Umaria-Katni section was originally laid with second-hand East Indian railway permanent-way on timber sleepers (82 lb. rails on three-fourths of the distance and 74 lb. rails on the remainder), but is now relaid with 75 lb. flat-footed rails on transverse steel sleepers. The Sini-Calcutta-Cuttack section is laid with 85 lb. steel rails on cast iron pot sleepers. The Cuttack-Waltair section is laid with 75 lb. flat-footed steel rails with 5-holed fish-plates on wooden and steel pea-pod sleepers.	
	Raipur-Dhamtari railway.—Laid with 31 lb. flat-footed steel rails on sâl sleepers.
	Parlakimedi Light railway.—Laid with 30 lb. flat-footed steel rails and transverse wooden sleepers.
(*b*) *Ballast*—	
	Bengal-Nagpur railway.—Ballasted throughout with good stone, except for a few miles on the Chakardharpore district, where laterite is used.
	Raipur-Dhamtari railway.—Moorum or sand and stone in a few cuttings.
	Parlakimedi Light railway.—The line is ballasted throughout.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		Brought forward .	...	...	...	1,626·92
						176·90
		BENGAL-NAGPUR SYSTEM—*concluded.*				
4	(*d*)	JUBBULPORE-GONDIA EXTENSION— (*2′ 6″ gauge.*)				
		Main line—				
		Jubbulpore to Nainpur	29-1-01	...	69·43	
		Nainpur to Gondia	29-1-01	18-4-03	74·00	143·43
		Branches—				
		Nainpur to Mandla	29-1-01	...	21·75	
		Nainpur to Seoni		*April 1903	47·13	
		Seoni to Chindwara		...	40·36	
		Total Branches . .	...	...	...	109·24
		Total Jubbulpore-Gondia extension .	...	...	...	252·67
4	(*e*)	MOHARBHANJ— (*2′ 6″ gauge.*)				
		Baripada to Baripada Road station . . .	18-7-02	...	28·50	
		Total Moharbhanj .	...	...	...	28·50
		Grand total, Lines under construction .	...	...	...	458·07
		GRAND TOTAL, BENGAL-NAGPUR SYSTEM	...	...	...	2,084·99
9	(*b*)	**BEZWADA EXTENSION**— (*See* Nizam's Guaranteed State system, page 358.)				

* Probable date of opening.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

	REMARKS.
5. **Details of construction**—*contd.*	
(*c*) *Tunnels.*—The following are the tunnels of 500 feet length and over :—Suranda (between Manharpur and Goilkera), 1,641 feet; Bhortonk (between Khongsara and Khodri), 1,000 feet; and Darekasa (between Salekasa and Darekasa), 735 feet.	
(*d*) *Bridges.*—The following are the important bridges of 1,000 feet length and over :—Kanhan (between Kamptee and Salwa), 6 spans of 170 feet and 2 spans of 60 feet (1,237 feet); Weinganga (between Tumsar Road and Tirora), 9 spans of 150 feet (1,450 feet); Sheonath No. I (between Muripar and Drug), 7 spans of 150 feet; Sheonath No. II (between Nipania and Bilha), 14 spans of 150 feet (2,250 feet); Hasdo (between Naila and Champa), 5 spans of 200 feet and 2 spans of 40 feet; Mand (between Kharsia and Naharpali), 9 spans of 100 feet and 2 spans of 30 feet; Eeb (between Belpahar and Jharsuguda), 9 spans of 150 feet (1,461 feet); Brahmini (between Kulunga and Rourkela), 9 spans of 150 feet and 1 span of 60 feet; Damoodur (between Ramkanali and Damoodur), 10 spans of 200 feet and 2 spans of 100 feet (2,364 feet); Subanrikha (between Asanboni and Moholia), 10 spans of 100 feet; Koakhaye (between Barang and Cuttack), 19 spans of 150 feet (3,212 feet); Kathjori (between Barang and Cuttack), 18 spans of 150 feet (2,890 feet); Mahanuddi (between Cuttack and Kapilas Road), 64 spans of 100 feet (6,912 feet); Beroopa (between Cuttack and Kapilas Road), 16 spans of 100 feet (1,728 feet); Brahmini (between Jenapur and Vyas Sorovar), 29 spans of 150 feet (4,640 feet); Byturnee (between Jajpur Road and Kenduapada), 15 spans of 150 feet (2,400 feet); Subanrikha (between Mohurbhanj and Jellasore), 11 spans of 150 feet and 2 spans of 60 feet (1,908 feet); Roopnarain (at mile 667), 7 spans of 300 feet and 4 spans of 100 feet (2,632 feet); and Midnapore (Cossye river, between Khargpur and Midnapore), 16 spans of 100 feet.	
(*e*) *Fencing.*—The line is unfenced except between Nagpur and Kamptee and at the more important stations and at some of the stationyards and first class level-crossings on the Barang-Waltair section.	
Parlakimedi Light railway.—The line is fenced where it runs along the public road.	
(*f*) *Curves.*—On the Bengal-Nagpur railway there is only one curve under a radius of 1,000 feet on the Sanctoria Coal branch, the length of which is 0·28 mile and radius 800 feet. On the Raipur-Dhamtari branch there are five curves of less than 1,000 feet aggregating 12 miles in length.	
(*g*) *Gradients.*—Of a total open mileage of 1,626·92 miles, 0·40 mile is on the ruling gradient of 1 in 84 on the 5′ 6″ gauge and 2·41 miles on 1 in 143 on the 2′ 6″ gauge, Raipur-Dhamtari railway.	

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
20	(*a*)	**BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR SYSTEM--**				
		(3′ 3⅜″ gauge.)				
		BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR—				
		Bhavnagar to Wadhwan	19-3-79	20-12-80	*105·03	
		Dhola to Dhoraji	19-3-79	19-1-81	88·89	
		Dhoraji to Porbandar	24-1-88	17-12-89	69·07	
		Porbandar to Porbandar Bandar	24-1-88	15-3-90	†1·55	
		Jetalsar to Junagad	24-12-86	1-9-88	16·00	
		Junagad to Veraval (including Junagad quarry line)	24-12-86	1-2-89	‡53·35	
		Veraval to Veraval Bandar	24-12-86	1-12-90	‡0·30	
		TOTAL, BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR PROPER.	...	...	...	334·19
20	(*b*)	JAMNAGAR— *(3′ 3⅜″ gauge.)*				
		Rajkot Junction to Bedi Bandar	Oct. 1893	8-4-97	§54·22	
		TOTAL, JAMNAGAR	...	...	....	54·22
20	(*c*)	JETALSAR-RAJKOT— *(3′ 3⅜″ gauge.)*				
		Jetalsar Junction to Rajkot	Feb. 1892	12-4-93	46·21	
		TOTAL, JETALSAR-RAJKOT	...	...	...	46·21
		Carried over	...	...	....	434·62

* Of this, the Bhavnagar Dock estate line, 1·03 miles,
† The Porbandar Dock estate line, 1·55 miles,
‡ Of this, the Junagad quarry line, 2·35 miles, and
§ Of this, the Bedi Bandar Dock estate line e, 3·93

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

		Open line. Miles.
(*a*) Bhavnagar-Gondal-Junagad-Porbandar railway	(3′ 3⅜″ gauge)	334·19
(*b*) Jamnagar railway	(3′ 3⅜″ gauge)	54·22
(*c*) Jetalsar-Rajkot railway	(3′ 3⅜″ gauge)	46·21
(*d*) Dhrangadra railway	(3′ 3⅜″ gauge)	20·83
	Total	455·45

2. **Bhavnagar-Gondal-Junagad-Porbandar railway system—**

(*a*) The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements :—

Agreements of—1st January 1897.—For the management and working of the "Integral Railways" as one system by a Board of Control.

8th April 1897.—Jamnagar railway
12th April 1893.—Jetalsar-Rajkot railway
1st June 1898.—Dhrangadra railway
} For management and working by the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration.

(*b*) The general conditions of the agreements are as follows :—

(i) *Government aid.*—Nil.

(ii) *Terms of agreement.*—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President and one nominee from each of the proprietary states of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those states are separately and entirely described as the "Integral railways" and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of votes recorded ("Members' single votes" and "Proprietary votes"). "Members' single votes" prevail at special meetings where each member has one vote, while "Proprietary votes," *i.e.*, votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

(iii) *Currency of agreement.*—Bhavnagar-Gondal-Junagad-Porbandar railway system.—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted, the terms of this agreement remain in force.

(iv) *Power of Board to determine agreement.*—By unanimous vote, the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary state can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.

(v) *Terms of working.*—Bhavnagar-Gondal-Junagad-Porbandar railway.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways, as may require apportionment, is divisible as prescribed in Appendix A to the agreement. The Bhavnagar state provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes; to compensation for losses for works and buildings falling into disuse; and to 7½ per cent. per annum for any additional accommodation required by the open system.

Jamnagar railway.—
Jetalsar-Rajkot railway.—
Dhrangadra railway.—
} The Board of Control work the railways at 40 per cent. of gross earnings of each railway, *plus* actual expenditure incurred on the maintenance of way, works and stations; and supply rolling-stock at 5 per cent. of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways.

(vi) *Rates and fares.*—Bhavnagar-Gondal-Junagad-Porbandar railway system.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

is worked for goods traffic only.
is worked for goods traffic only.
Junagad Dock estate line, 0·30 mile, are worked for goods traffic only.
miles, is worked for goods traffic only.

P. T. O.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR SYSTEM—*concluded.*			Miles.	Miles.
		Brought forward .	...	...	...	434·62
20	(*d*)	DHRANGADRA— (*3′ 3⅜″ gauge.*)				
		Wadhwan Junction to Dhrangadra— . . .	23-12-97	1-6-98	20·83	
		TOTAL, DHRANGADRA .	...	...	...	20·83
		GRAND TOTAL, BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR SYSTEM.	...	...	...	455·45
7	(*g*)	**BHOPAL-ITARSI—** (*See* Great Indian Peninsula system, page 332.)				
7	(*f*)	**BHOPAL-UJJAIN—** (*See* Great Indian Peninsula system, page 332.)				
7	(*e*)	**BINA-GOONA-BARAN—** (*See* Great Indian Peninsula system, page 332.)				
21	(*e*)	**BIRUR-SHIMOGA—** (*See* Southern Mahratta system, page 396.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
3. Details of construction—
(*a*) *Permanent-way.*—The permanent-way consists of 41½ lb. steel flat-footed rails, laid mostly on creosoted pine and deodar sleepers.
(*b*) *Ballast.*—With the exception of one or two short lengths ballasted with kunkur, the line is laid with a good quality of broken stone ballast.
(*c*) *Bridges.*—The only important bridge is the Oojat (between Shahpur and Lushala), 7 spans of 100 feet and 3 spans of 133 feet.
(*d*) *Fencing.*—The line is practically unfenced throughout its length.
(*e*) *Curves.*—There are no curves under a radius of 1,000 feet.
(*f*) *Gradients.*—Of a total open mileage of 455·45 miles on the system, 0·07 mile is on the ruling gradient of 1 in 67.

Appendix 47.
History of railways.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
8	(*a*)	**BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—**				
		COMPANY'S SECTION— (*5′ 6″ gauge.*)				
		Main line—				
		Colaba to Marine lines	May 1856	18-1-70	2·00	
		Marine lines to Charni Road	1868	19-6-69	0·75	
		Charni Road to Bellasis Road	Charni Road to Grant Road, May 1863; Grant Road to Dadar, July 1862; Dadar to 50th mile (from Colaba), 1859; 50th mile (from Colaba) to Surat, 1858.	13-9-68	0·75	
		Bellasis Road to Bulsar		28-11-64	121·00	
		Bulsar to Navsari		2-9-61	24·25	
		Navsari to Sachin		20-5-61	9·25	
		Sachin to Surat		18-3-61	9·00	
		Surat to Amroli		19-11-60	2·25	
		Amroli to Anklesvar		10-2-60	28·75	
		Anklesvar to the Nerbudda		5-12-60	5·50	
		Nerbudda to Broach	1857 and 1859	22-6-60		
		Broach to Baroda		9-1-61	43·75	
		Baroda to Dholia		22-4-61	11·25	
		Dholia to Mehmadabad		3-9-62	33·25	
		Mehmadabad to Ahmedabad		21-1-63	17·89	
		Ahmedabad to Sabarmati	October 1870	1-1-70	3·75	
		Sabarmati to Sanand		24-5-71	13·75	
		Sanand to Viramgam		30-11-71	22·98	
		(*3′ 3⅜″ gauge*).				
		Viramgam to Wadhwan	*21-4-02	*14-12-02	39·23	
		Total Main line	...	...	...	389·35
		Branches—				
		Godhra branch—				
		Anand to Dakor	5-11-73	8-4-74	16·75	
		Dakor to Rukhyal	...	6-1-75	1·75	
		Rukhyal to Hungari	...	6-12-76	9·00	
		Hungari to Pali	...	29-1-77	4·71	
		Pali to Godhra	...	26-2-82	17·00	
		Patri branch—			49·21	
		Kharaghoda to Viramgam	13-6-71	12-5-73	22·12	
		Total Branches	...	...	...	71·33
		TOTAL OPEN MILEAGE, COMPANY'S SECTION	...	...	...	460·68
		DOUBLE LINE, COMPANY'S SECTION—				
		Colaba to Marine lines	...	18-1-70	1·91	
		Marine lines to Charni Road	...	19-6-69	0·71	
		Charni Road to Bellasis Road	...	13-9-68	1·29	
		Bellasis Road to Mahim	...	20-7-65	5·44	
		Mahim to Bandra	...	23-2-66	1·07	
		Bandra to Santa Cruz	...	23-5-66	1·83	
		Santa Cruz to Andheri	...	29-8-67	2·71	
		Andheri to Bhayndar	...	27-4-85	13·33	
		Bhayndar to Virar	...	1-10-85	10·34	
		Virar to Palghar	...	1-12-97	19·28	
		Palghar to Dahanu Road	...	17-1-98	20·37	
		Dahanu Road to Gholvad	...	20-4-00	6·68	
		Gholvad to Daman Road	...	18-10-00	23·19	
		Daman Road to Bulsar	...	29-1-02	16·44	
		Bulsar to Sachin	...	21-4-02	32·90	
		Sachin to Kankra Khari	...	4-7-87	6·36	
		Kankra Khari to Surat	...	5-6-68	2·72	
		Carried over	...	...	166·57	460·68

* Dates of sanction and opening of original 5′ 6″ gauge track: 24th October 1870 and 25th May 1872, respectively.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Bombay, Baroda and Central India railway system is made up of—

		Open line.	Under construction.	Total.
		Miles.	Miles.	Miles.
(*a*) Bombay, Baroda and Central India railway .	(5′ 6″ gauge)	460·68	44·00	504·68
(*b*) Tapti Valley railway	(5′ 6″ gauge)	155·48	...	155·48
(*c*) Petlad-Cambay railway (Anand-Tarapur section)	(5′ 6″ gauge)	21·50	...	21·50
(*d*) Petlad-Cambay railway (Tarapur-Cambay section)	(5′ 6″ gauge)	10·92	...	10·92
(*e*) Nagda-Ujjain railway	(5′ 6″ gauge)	34·32	...	34·32
(*f*) Godhra-Rutlam-Nagda railway . . .	(5′ 6″ gauge)	141·14	...	141·14
(*g*) Rajputana-Malwa railway	(3′ 3⅜″ gauge)	1,648·36	133·32	1,781·68
(*h*) Ahmedabad-Parantij railway	(3′ 3⅜″ gauge)	54·70	...	54·70
(*i*) Palanpur-Deesa railway	(3′ 3⅜″ gauge)	17·28	...	17·28
(*j*) Gaekwar's Mehsana railway	(3′ 3⅜″ gauge)	92·63	...	92·63
(*k*) Gaekwar's Dabhoi railway	(2′ 6″ gauge)	78·80	9·20	88·00
(*l*) Rajpipla railway	(2′ 6″ gauge)	37·37	...	37·37
(*m*) *Jaipur (Siwai Madhopur) railway* . .	(3′ 3⅜″ *gauge*)	...	72·85	72·85
(*n*) Vijapur-Kalol-Kadi railway	(3′ 3⅜″ gauge)	29·44	12·20	41·64
(*o*) *Ahmedabad-Dholka railway*	(3′ 3⅜″ *gauge*)	...	33·54	33·50
	Total . .	2,782·62	305·11	3,087·73

2. **Bombay, Baroda and Central India railway—**

(*a*) The Bombay, Baroda and Central India railway, Company's section, is worked under the following contracts :—

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad.

2nd February 1859—for the construction and working of a line from Bombay to Surat.

17th November 1871—for the construction and working of a line from Viramgam to Wadhwan.

1st February 1901—as to share of working expenses debitable to branch lines worked.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Guarantee of interest in sterling at 5 per cent. for the term of the contract. On some portion of the share capital and on debentures lower rates of interest also are guaranteed.

(ii) *Currency of contracts.*—The contracts are current for a period of 99 years from 1855 when the line becomes the property of Government on payment of the actual capital outlay in sterling. The Government may, however, determine the contract by purchase after the expiration of 25 or 50 years of the term, namely in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contract at any time, on giving three months' notice, if the Company fail to observe obligations. In such case, Government repay the capital expended.

NOTE.—The Government relinquished their right to determine the contract at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1905 (within six months of the 1st of May).

(iii) *Power of Company to surrender contract.*—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.

(iv) *Terms of working*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company, the interest payments being calculated for the purpose of this division at 1*s.* 10*d.* to the rupee.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
8	(*a*)	**BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*contd.***			Miles.	Miles.
		Brought forward .	...	... .	166·57	460·68
		DOUBLE LINE—*concluded.*				
		Surat to Amroli	...	9-10-67	2·19	
		Amroli to Sayan	...	25-5-98	6·43	
		Sayan to Kim	...	1-10-98	6·33	
		Kim to Anklesvar	...	11-12-99	16·16	
		Broach to Miyagam	...	15-10-99	25·42	
		Miyagam to Itola	...	15-9-97	7·82	
		Itola to Baroda	...	7-6-95	10·77	
		Barejadi to Ahmedabad	...	2-6-87	10·21	
		TOTAL DOUBLE LINE, COMPANY'S SECTION .	...	...	*251·90	
8	(*b*)	TAPTI VALLEY— (*5′ 6″ gauge.*)				
		Kankra Khari to Vyara	...	1-12-98	35·59	
		Vyara to Chinchpada	...	10-7-99	36·55	
		Chinchpada to Nandarbar	...	8-10-99	25·20	
		Nandarbar to Dondaiche	...	11-11-99	21·44	
		Dondaiche to Nardana	...	25-11-99	19·78	
		Nardana to Amalner	...	15-3-00	16·92	
		TOTAL, TAPTI VALLEY .	...	...	...	155·48
8	(*d*)	PETLAD-CAMBAY (ANAND-TARAPUR SECTION)— (*5′ 6″ gauge.*)				
		Anand to Petlad	Dec. 1888	5-5-90	13·17	
		Petlad to Tarapur	4-7-99	20-6-01	8·33	
		TOTAL, PETLAD-CAMBAY (ANAND-TARAPUR SECTION)	...	...	...	21·50
8	(*e*)	PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION)— (*5′ 6″ gauge.*)				
		Tarapur to Cambay	4-7-99	20-6-01	10·92	
		TOTAL, PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION)	...	...	...	10·92
		GRAND TOTAL, PETLAD-CAMBAY .	...	...	...	32·42
8	(*c*)	NAGDA-UJJAIN— (*5′ 6″ gauge.*)				
		Nagda to Ujjain	17-12-94	15-7-96	34·32	
		TOTAL, NAGDA-UJJAIN .				34·32
8	(*f*)	GODHRA-RUTLAM-NAGDA— (*5′ 6″ gauge.*)				
		Godhra to Limkhera	29-10-90	16-1-93	25·09	
		Limkhera to Dohad		7-3-94	19·55	
		Dohad to Rutlam		22-10-94	70·46	
		Rutlam to Nagda	Dec. 1894	11-5-96	26·04	
		TOTAL, GODHRA-RUTLAM-NAGDA .	...	...	...	141·14
		Carried over .	...	...	...	824·04

* Excluding 4·17 miles from Anklesvar to Nerbudda Block station constructed but not opened for traffic.

REMARKS.

2. Bombay, Baroda and Central India railway—*concluded.*

(*b*) General conditions—*concluded.*

(v) *Rates and fares.*—Under the contract, Government fix a maxima which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay, and which cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary their rates within the prescribed maxima without reference to Government.

3. Tapti Valley railway—

(*a*) The Tapti Valley railway is worked under the following contracts :—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory is also provided free.

(ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government undertake to construct (from funds supplied by the Company) work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

(v) *Rates and fares.*—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

4. Petlad-Cambay railway (Anand-Tarapur section)—

(*a*) The Petlad-Cambay railway (Anand-Tarapur section) is worked under the following—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*continued.*				
		Brought forward .	...	...	...	824·04
8	(*g*)	RAJPUTANA-MALWA— (*3′ 3⅜″ gauge.*)				
		RAJPUTANA SECTION—				
		Main line—				
		Delhi to Rewari	1-3-70	14-2-73	51·25	
		Rewari to Alwar	14-8-72	15-9-74	46·25	
		Alwar to Bandikui		7-12-74	37·75	
		Bandikui to Dausa	20-10-71	20-4-74	17·75	
		Dausa to Jaipur		12-10-74	38·00	
		Jaipur to Phulera		1-3-75	34·25	
		Phulera to Ajmer	9-4-73	1-1-75	49·75	
		Ajmer to Beawar	4-9-76	15-5-78	32·25	
		Beawar to Haripur		12-8-79	21·00	
		Haripur to Sojat Road		20-10-80	20·50	
		Sojat Road to Palanpur		1-1-81	148·00	
		Palanpur to Ahmedabad		15-11-79	83·00	
		Total Main line .	...	...	...	579·75
		Branches on Rajputana section—				
		Farukhnagar Salt branch	1-3-70	14-2-73	7·75	
		Agra branch—				
		Bandikui to Bhurtpore	20-10-71	24-4-74	60·50	
		Bhurtpore to Agra Fort		11-8-73	34·14	
		Agra Fort to Jumna East bank . . .		1-1-76	1·50	
		(*5′ 6″ gauge.*)				
		Jumna East bank to Agra Cantonment . .	...	1-1-76	3·07*	
					99·21	
		Sambhar Lake Salt branch	8-4-73	1-3-75	4·50	
		Japog extension	14-7-75	Oct. 76	4·50	
		Extension of Sambhar branch to Jhowra .	15-5-78	20-12-79	17·00	
		Kankaroola siding	...	15-2-81	1·25	
		Additional salt sidings in the Sambhar lake .	...	1-9-91	5·02	
		Total Branches .	...	...	...	139·23
		TOTAL, RAJPUTANA SECTION .	...	...	...	718·98
		Total, Rajputana-Malwa, carried over .	...	...	...	718·98
		Total, Bombay, Baroda and Central India Railway system carried over	...	...	...	824·04

* Of this, the length on the Jumna bridge is mixed (5′ 6″ and 3′ 3⅜″) gauges.

	REMARKS.
4. Petlad-Cambay railway (Anand-Tarapur section)—*concld.*	
(*b*) The general conditions are as follows :—	
(i) *Government aid.*—The line is the property of the Baroda State.	
(ii) *Currency of agreement.*—The agreement is current for a period of three years.	
(iii) *Power to determine agreement.*—Either party may terminate the agreement at any time on giving one year's notice.	
(iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway excluding 2′ and 2′ 6″ gauge lines in proportion to the total earnings of the Petlad-Cambay and Gaekwar's Mehsana railways.	
(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible to conform to those generally in force on the Bombay, Baroda and Central India railway.	
5. Petlad-Cambay railway (Tarapur-Cambay section)—	
(*a*) The Petlad-Cambay railway (Tarapur-Cambay section) is worked under—	
Agreement of—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.	
(*b*) The general conditions of the agreement are as follows :—	
(i) *Government aid.*—The line is the property of the Cambay State.	
(ii) *Currency of agreement.*— } (iii) *Power to determine agreement.*— }	The agreement may be terminated at any time on one year's notice from either party expiring on the 30th June or 31st December in any year.
(iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines in proportion to the total earnings of the Tarapur-Cambay railway.	
(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Cambay State and as far as possible to conform to those generally in force on the Bombay, Baroda and Central India railway.	
6. Nagda-Ujjain railway—	
(*a*) The Nagda-Ujjain railway is worked under the following :—	
Agreement of—15th July 1896 (between His Highness the Maharaja of Scindia and the Bombay, Baroda and Central India Railway Company) for working.	
Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.	
(*b*) The general conditions are as follows :—	
(i) *Government aid.*—The line is the property of the Scindia State.	
(ii) *Currency of agreement.*— } (iii) *Power to determine agreement.*— }	The agreement may be terminated at any time after 15th July 1896 on one year's notice from either party expiring on the 30th June or 31st December in any year.
(iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.	
(v) *Rates and fares.*—To conform to those generally in force on the Godhra-Rutlam-Nagda railway.	

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*contd.*			Miles.	Miles.
		Total Bombay, Baroda and Central India Railway system, Brought forward	...	...	...	824·04
		Total Rajputana-Malwa, Brought forward	...	...	...	718·98
8	(*g*)	**Rajputana-Malwa—*contd.*** (*3′ 3⅜″ gauge.*)				
		MALWA SECTION—				
		Main line—				
		Khandwa to Sanawad	8-1-72	1-2-74	34·25	
		Sanawad to Mortakka		1-4-74	3·50	
		Mortakka to Choral		20-1-75	20·50	
		Choral to Mhow		1-1-78	15·69	
		Mhow to Indore		3-8-76	13·00	
		Nerbudda bridge		5-10-76	...	
		Indore to Fatehabad	29-10-73	3-8-76	25·23	
		Fatehabad Junction to Rutlam		11-7-78	48·75	
		Rutlam to Jaora	5-10-77	28-2-80	20·50	
		Jaora to Mandsaur		8-4-80	31·75	
		Mandsaur to Neemuch		2-7-80	30·25	
		Neemuch to Nimbahera	30-4-79	10-3-81	16·40	
		Nimbahera to Chitorgarh		19-3-81	17·65	
		Chitorgarh to Nasirabad		1-12-81	100·65	
		Nasirabad to Ajmere	14-4-74	14-2-76	14·15	
		Total Main line	...	...		392·27
		Branch on Malwa section—				
		Ujjain branch—				
		Fatehabad to Ujjain	29-10-73	3-8-76	12·00	
		Ujjain branch extension across the Sipra river to Ujjain city	6-12-82	1-3-84	2·88*	
		Total Branch	...	...		14·88
		TOTAL MALWA SECTION	...	...	...	407·15
		CAWNPORE-ACHNERA SECTION—				
		Main line—				
		Cawnpore to Kanauj	13-10-78	15-12-80	49·51	
		Kanauj to Farukhabad		1-2-81	36·50	
		Farukhabad to Kasganj	13-7-82	14-4-84	67·00	
		Kasganj to Hathras		1-7-84	34·00	
		Hathras to Muttra	April 1874	19-10-75	29·00	
		Jumna bridge	July 1882	1-7-84	1·00	
		Muttra to Achnera	Feb. 1880	7-11-81	22·33	
		Total Main line	...	...		239·34
		Branches on Cawnpore-Achnera section—				
		Brahmavart branch	18-3-84	10-11-85	5·00	
		Soron branch	16-3-83	4-1-85	9·00	
		Brindaban branch	4-5-88	26-8-89	7·32	
		Total Branches	...	...		21·32
		TOTAL CAWNPORE-ACHNERA SECTION				260·66
		REWARI-BHATINDA-FAZILKA SECTION—				
		Main line—				
		Rewari to Hissar	13-9-81	20-3-83	89·00	
		Hissar to Sirsa	8-10-82	1-4-84	50·50	
		Sirsa to Kot Kapura		1-10-84	72·07	
		Kot Kapura to Fazilka		1-1-85	50·00	
		TOTAL, REWARI-BHATINDA-FAZILKA SECTION	...	...	...	†261·57
		GRAND TOTAL, RAJPUTANA-MALWA	...	...	...	1,648·36
		Carried over	...	...	...	2,472·40

* Includes 2·10 miles, 5′ 6″ gauge, from Sipra Junction to station opened in 1899.
† Includes 26·28 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge between Kot Kapura and Bhatinda.

	REMARKS.
7. Godhra-Rutlam-Nagda railway—	
(*a*) The Godhra-Rutlam-Nagda railway is worked under the following contracts :—	
Contracts of—5th October 1893	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Godhra-Rutlam railway.
1st October 1897	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Rutlam-Nagda railway.
1st February 1901	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.
(For terms of contracts—see Rajputana-Malwa railway, paragraph 8 *et seq.*)	
8. Rajputana-Malwa railway—	
(*a*) The Rajputana-Malwa railway is worked under the following contracts :—	
Contracts of—24th September 1884	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.
16th March 1888.	—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway.
8th November 1889.	—Contract supplemental to that of 1884 for maintaining and working the Brindaban branch.
1st February 1901.	—Contract modifying that of 1884.
(*b*) The general conditions of the contracts are as follows :—	
(i) *Government aid.*—The line is the property of the State.	
(ii) *Currency of contract.*—The duration of the contract is up to the 31st December 1905.	
(iii) *Power of company to surrender contract.*—Nil.	
(iv) *Terms of working.*—The working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) excluding 2′ and 2′ 6″ gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3′ $3\frac{3}{8}$″ gauge, and Godhra-Rutlam-Nagda, 5′ 6″ gauge, railways, are paid in full to Government.	
(v) *Rates and fares.*—Maximum and minimum rates and fares have been fixed within which the Company are authorised to vary the rates.	
(vi) *General remarks.*—The Maharaja Holkar lent the British Government one hundred lakhs of rupees at $4\frac{1}{2}$ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.	
The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.	
The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway; but Government reserve the right to take back the line at any time.	
The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company from the 1st January 1885.	
9. Ahmedabad-Parantij railway—	
(*a*) The Ahmedabad-Parantij railway is worked under the following contracts :—	
Contracts of—13th March 1896	(between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.
4th June 1896	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.
1st February 1901	(between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*contd.*			Miles.	Miles.
		Brought forward	...	...	...	2,472·40
8	(*g*)	RAJPUTANA-MALWA—*concld.*				
		DOUBLE LINE, RAJPUTANA SECTION.				
		Agra Fort to Agra Cantonment	...	11-8-73	1·14	
		Second track at Delhi	...	25-12-02	1·78	
		Total Double line	...	...	2·92	
8	(*i*)	AHMEDABAD-PARANTIJ— (*3′ 3⅜″ gauge.*)				
		Ahmedabad to Talod	January 1896.	1-5-97	32·82	
		Talod to Parantij		2-7-97	7·83	
		Parantij to Idar-Ahmednagar		23-10-97	14·05	
		TOTAL, AHMEDABAD-PARANTIJ	...	...	...	54·70
8	(*k*)	PALANPUR-DEESA— (*3′ 3⅜″ gauge.*)				
		Palanpur to Deesa	20-3-92	8-11-93	17·28	
		TOTAL, PALANPUR-DEESA	...	...	...	17·28
8	(*h*)	GAEKWAR'S MEHSANA— (*3′ 3⅜″ gauge.*)				
		Mehsana to Vadnagar	...	21-3-87	20·73	
		Vadnagar to Kheralu	...	12-12-88	7·00	
		Viramgam to Mehsana	...	1-2-91	40·21	
		Mehsana to Patan	...	20-7-91	24·69	
		TOTAL, GAEKWAR'S MEHSANA	...	...	...	92·63
8	(*l*)	GAEKWAR'S DABHOI— (*2′ 6″ gauge.*)				
		Miyagam to Dabhoi	21-3-72	8-4-73	20·00	
		Dabhoi to Chandod	27-11-77	15-4-79	10·62	
		Dabhoi to Bahadarpur		17-9-79	9·64	
		Dabhoi to Goya Gate	29-1-79	1-7-80	17·00	
		Goya Gate to Vishvamitri		24-1-81	1·63	
		Bahadarpur to Bodeli	Sept. 1888	16-6-90	12·77	
		Vishvamitri to Padra	28-8-95	1-7-97	7·14	
		TOTAL, GAEKWAR'S DABHOI	...	...	...	78·80
		Carried over	...	...	...	2,715·83

on the 31st December 1902, alphabetically arranged.

REMARKS.
9. Ahmedabad-Parantij railway—concld.
(*b*) The general conditions of the contracts are as follows :—
(i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.
(ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.
(iii) *Power of Company to surrender contract.*—Nil.
(iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.
(v) *Rates and fares.*—To be arranged from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.
10. Palanpur-Deesa railway—
(*a*) The Palanpur-Deesa railway is worked under—
Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated 23rd June 1892, from the Secretary of State to the Government of India.
Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.
(*b*) The general conditions of the terms are as follows :—
(i) *Government aid.*—The line is owned jointly by Government and the Palanpur Durbar.
(ii) *Currency of contract.*—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.
(iii) *Power of Company to surrender contract.*—Nil.
(iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each, after excluding from the Government capital the sum of Rs. 25,117 for extra expenditure in providing a 5' 6" gauge substructure.
(v) *Rates and fares.*—Same as on the Rajputana-Malwa railway.
11. Gaekwar's Mehsana railway—
(*a*) The Gaekwar's Mehsana railway is the property of the Baroda State and is worked under the following:—
Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.
Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.
NOTE.—See Petlad-Cambay railway (Anand-Tarapur section), paragraph 4 *ante*. The terms of working are the same for both railways.
12. Gaekwar's Dabhoi railway—
(*a*) The Gaekwar's Dabhoi railway is worked under—
Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Appendix 47.
History of railways.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*continued.*			Miles.	Miles.
		Brought forward .	...	...	...	2,715·81
8	(*m*)	RAJPIPLA— (*2′ 6″ gauge.*)				
		Anklesvar to Raj-Pardi	Oct. 1894	1-7-97	19·03	
		Raj-Pardi to Umalla	Feb. 1898	19-1-99	4·95	
		Umalla to Amletha		1-6-99	7·85	
		Amletha to Nandod		20-7-99	5·54	
		TOTAL, RAJPIPLA .	...	...	...	37·37
8	(*j*)	VIJAPUR-KALOL-KADI— (*3′ 3⅜″ gauge.*)				
		Vijapur to Kalol	23-5-99	10-6-02	29·44	
		TOTAL VIJAPUR-KALOL-KADI .	...	...	...	29·44
		TOTAL, OPEN MILEAGE, BOMBAY, BARODA AND CENTRAL INDIA SYSTEM	...	...	...	2,782·62
		Lines under construction or sanctioned for construction—				
8	(*a*)	BOMBAY, BARODA AND CENTRAL INDIA— (*5′ 6″ gauge.*)				
		Baroda to Godhra	6-6-02	*July 1903	44·00	
		TOTAL, BOMBAY, BARODA AND CENTRAL INDIA .	...	...		44·00
8	(*g*)	RAJPUTANA-MALWA— (*3′ 3⅜″ gauge*).				
		Rewari to Phulera	20-12-01	†	133·32	
		TOTAL, RAJPUTANA-MALWA .	...	...	...	133·32
8	(*l*)	GAEKWAR'S DABHOI— (*2′ 6″ gauge.*)				
		Padra to Ranu	18-1-02	*31-3-03	4·18	
		Ranu to Mobha			5·02	
		TOTAL, GAEKWAR'S DABHOI .	...	...	...	9·20
8	(*n*)	JAIPUR (SIWAI-MADHOPUR)— (*3′ 3⅜″ gauge.*)				
		Sanganer to Siwai-Madhopur in the Jaipur State .	2-12-97	‡	72·85	
		TOTAL, JAIPUR .	...	...	...	72·85
8	(*j*)	VIJAPUR-KALOL-KADI— (*3′ 3⅜″ gauge.*)				
		Kalol to Kadi	29-3-01	*1-6-03	12·20	
		TOTAL, VIJAPUR-KALOL-KADI .	...	...		12·20
8	(*o*)	AHMEDABAD-DHOLKA— (*3′ 3⅜″ gauge.*)				
		Sabarmati to Bavla	2-10-01	23-2-03	25·00	
		Bavla to Dholka		1-4-03	8·54	
		TOTAL, AHMEDABAD-DHOLKA .	...	...		33·54
		Total Lines under construction .	...	...	...	305·11
		GRAND TOTAL, BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM	...	...	...	3,087·73

*Probable date of opening.
† Commencement of work not yet authorised.
‡ Completion stopped for want of funds.

REMARKS.
12. Gaekwar's Dabhoi railway—concld. (*b*) The general conditions of the agreement are as follows:— (i) *Government aid.*—The line is the property of the Baroda State. (ii) *Currency of agreement.*—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th of June or 31st of December. (iii) *Terms of working.*—The Company work the railway at actual cost, *plus* 12½ per cent. on total working expenses (but not less than Rs. 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence. (iv) *Rates and fares.*—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government; and as far as possible must conform generally to those in force on the Bombay, Baroda and Central India railway.
13. Rajpipla railway— (*a*) The Rajpipla railway is worked under— *Agreement of*—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company. (*b*) The general conditions of the agreement are as follows:— (i) *Government aid.*—The line is the property of the Rajpipla State. (ii) *Currency of agreement.*—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side. (iii) *Terms of working.*—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund; and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence. (iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform to those generally in force on the Bombay, Baroda and Central India railway.
14. Jaipur (Siwai-Madhopur) railway— **15. Vijapur-Kalol-Kadi railway**— } The agreements for working these lines have not as yet been executed.
16. Ahmedabad-Dholka railway— (*a*) The Ahmedabad-Dholka railway is worked under the following contracts:— *Contracts of*—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction. 18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working. (*b*) The general conditions of the contracts are as follows:— (i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free. (ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure. (iii) *Power of Company to surrender contract.*—Nil. (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines proportionate to its total earnings, but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company. (v) *Rates and fares.*—To be arranged from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the undertaking.
17. General remarks.—The following sections of the Bombay, Baroda and Central India railway are worked over by other lines:—0·24 mile at Ujjain by the Indian Midland railway, and 7·25 miles from Dadar Junction to Colaba by the Great Indian Peninsula railway. The length from Dadar Junction to Carnac bridge, 4·39 miles of the Great Indian Peninsula railway is worked over by the Bombay, Baroda and Central India railway. The following sections of the Rajputana-Malwa railway are worked over by foreign lines—1·00 mile from Agra East Bank to Agra Fort by the East Indian railway; and 2·89 miles at Agra by the Indian Midland railway.

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History of railways.

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History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*continued.*				

on the 31st December 1902, alphabetically arranged.

REMARKS.

18. **Details of construction—**

(*a*) *Permanent-way.*—

Bombay, Baroda and Central India railway.—The main line is chiefly laid with double-headed steel rails, weighing 69lb. to the yard, with the exception of the length from Colaba to Dadar which is laid with 82lb. rails. On the southern part of the line (Bombay to Broach) the rails are laid on creosoted pine sleepers. On the double line from Colaba to Dadar, Virar to Dahanu, Amroli to Anklesvar and Chamargam to Miyagam, 82lb. bull-headed steel rails are laid on creosoted pine sleepers and four-holed chairs. On the double line from Dahanu to Sachin, Broach to Chamargam and from Miyagam to Itola 82lb. bull-headed steel rails are laid on cast-iron pot sleepers. On the double line, Itola to Baroda, 69lb. double-headed steel rails are laid on cast-iron pot sleepers. The rails on the Patri branch are flat-footed, weighing 48lb. and 50lb. to the yard, and are laid on creosoted pine sleepers. The rails on the Godhra branch are 61lb. and 69lb. steel, laid, with a few trifling exceptions, on iron pot sleepers. The Viramgam-Wadhwan section was originally laid with 60lb. iron rails on cast iron pot sleepers; on the conversion of the line to metre gauge these were removed and 41¼lb. steel rails and deodar sleepers substituted.

Tapti Valley railway.—The permanent-way consists of 70 lb. flat-footed rails laid on creosoted pine and teak sleepers.

Petlad-Cambay railway.—The permanent-way consists of 66¼lb. flat-footed steel rails and creosoted pine sleepers.

Nagda-Ujjain railway.—The permanent-way consists of 75lb. flat-footed steel rails, with 5 bolt hole fish-plates, laid on cast-iron oval pot sleepers, Indian Midland railway pattern.

Godhra-Rutlam-Nagda railway.—The rails are flat-footed, steel, 75lb. to the yard, laid on transverse steel, deodar and creosoted pine sleepers.

Rajputana-Malwa railway.—The rails originally used were 36lb. and 40lb. to the yard laid on transverse deodar and creosoted pine sleepers. The 36lb. iron rails have nearly all been replaced by 41¼lb. steel rails which in future renewals will be replaced by 50lb. rails. The creosoted half-round pine sleepers with which the road was first laid are being replaced by deodar sleepers. The Cawnpore-Farukhabad section is laid with iron rails 40lb. to the yard. The line from Farukhabad to Achnera is laid with steel rails, 41¼lb. to the yard, on transverse sleepers of deodar. On the Rewari-Bhatinda-Fazilka line, the rails are mainly of steel, 41¼lb. to the yard, laid on deodar and Denham-Olpherts' pot sleepers.

Ahmedabad-Parantij railway.—The line is laid with 41¼lb. flat-footed steel rails on transverse deodar and creosoted pine sleepers.

Palanpur-Deesa railway.—The rails are iron, 40lb. to the yard, laid on Denham-Olpherts' cast-iron sleepers or on steel dish cover sleepers taken from the main line.

Gaekwar's Mehsana railway.—The length from Mehsana to Kheralu is laid with steel rails, 41¼ lb. to the yard, on transverse steel trough sleepers. The remainder of the line is laid with iron and steel rails, 40lb. and 41¼lb. to the yard, on deodar sleepers, except a mile on the Mehsana-Viramgam section, which is laid with steel trough sleepers.

Gaekwar's Dabhoi railway.—The line was originally laid with iron rails weighing 30lb. to the yard for 20 miles, and with steel rails weighing 30lb. and 31lb. to the yard for 39·25 miles and 12·50 miles, respectively, on wooden sleepers. The renewals are being made with 31lb. steel rails. The Vishvamitri-Padra section is laid with 31lb. steel rails and wooden sleepers.

Rajpipla railway.—The line is laid with 41¼lb. iron rails on half round jungle teak sleepers.

(*b*) *Ballast.*—The whole system is ballasted throughout with stone, gravel or sand.

(*c*) *Tunnels.*—The following are the tunnels of 500 feet length and over:—Panchpipla between Bagrangarh and Amargar, 765 feet; and Mhow ghat No. 4, between Patalpani and Kalakand, 622·75 feet. There are three other tunnels varying from 279·25 feet to 365·50 feet in length, aggregating 994 feet on the Sone ghats.

(*d*) *Bridges.*—The following are the important bridges of 1,000 feet and over:—South and North Bassein (between Bhayndra and Umeyla), 69 spans of 60 feet, and 25 spans of 60 feet, respectively; South and North Viturna (between Virar and Sophala), 20 spans of 60 feet and 23 spans of 60 feet, respectively; Tapti (between Surat and Amroli), 30 spans of 60 feet (1,875 feet); Nerbudda (between Anklesvar and Broach), 25 spans of 183·50 feet (4,687·50 feet); Mhye (between Bajuva and Vasad), 27 spans of 60 feet. Sabarmati (between Ahmedabad and Sabarmati), 1 span of 67 feet, 20 spans of 60 feet and 1 span of 52·41 feet; and Mhye (between Sevalia and Timba Road), 64 spans of 30 feet; Mahi (between Bhaironghar and Raoti), 6 spans of 150 feet and 2 spans of 100 feet; Chambal, near Nagda, 10 spans of 100 feet; Jumna (between Agra Fort and Agra Junction), 16 spans of 133 feet and 6 spans of 23 feet (2,272 feet); Jumna (between Muttra Cantonment and Raya), 7 spans of 150 feet (1,146 feet); Nerbudda (between Mortakka and Barwaha), 14 spans of 183 feet (2,836 feet); and Siew (between Mandsaur and Dalauda), 11 spans of 30 feet.

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History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—*concluded.*				
2	(*c*)	**BRAHMAPUTRA-SULTANPUR—**				
		(*See* Eastern Bengal system, page 314.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.
18. Details of construction—*concluded.*
(*e*) *Fencing.*—
Bombay, Baroda and Central India railway.—The main line is wholly fenced. As far as Ahmedabad it is all wire fence, except some 2 miles of cactus. From Ahmedabad to Wadhwan there are 32½ miles of cactus and 47½ miles of wire. The Godhra branch is fenced partly with cactus (2¼ miles) and partly with wire (46¾ miles). The Patri branch is unfenced.
Tapti Valley railway.—The line is not fenced, except round station yards.
Petlad-Cambay railway (Anand-Tarapur section).—The whole of the Anand-Petlad section is fenced with cactus.
Petlad-Cambay railway (Tarapur-Cambay section).—The line has not been fenced, except round station yards.
Nagda-Ujjain railway.—The line has not been fenced, except round station yards.
Godhra-Rutlam-Nagda railway.—The line is fenced with wire from mile 0 to mile 35 and then in different sections, making an aggregate of 76½ miles. The rest of the line is unfenced.
Rajputana-Malwa railway.—The total length of line fenced on the Rajputana section is 658 miles, or three-fourths of the whole section. The Malwa section is generally unfenced, except on the ghats between Mhow and Kalakund and at stations. The Cawnpore-Achnera section is partially fenced, and the fencing is chiefly confined to one side of the line between Cawnpore and Farukhabad and between Hathras City and Muttra Cantonment. There are a few miles of double fencing at stations. The Rewari-Bhatinda-Fazilka section is fenced for about 110 miles of the main line and at stations.
Ahmedabad-Parantij railway.—Fenced only in station yards.
Palanpur-Deesa railway.—The entire length, with the exception of a little wire fencing at mile 2, is fenced with cactus.
Gaekwar's Mehsana railway.—The whole line was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts, and what remains is much broken up.
Gaekwar's Dabhoi railway.—There is no fencing, except what has been put up by the villagers themselves.
Rajpipla railway.—There is no fencing, except in the station yards.
(*f*) *Curves*—
5′ 6″ *gauge sections.*—There are no curves under a radius of 1,000 feet.
3′ 3⅜″ *and narrower gauge sections, excluding Gaekwar's Dabhoi railway.*—There are no curves under a radius of 1,000 feet.
Gaekwar's Dabhoi railway.—There are no curves under a radius of 500 feet.
(*g*) *Gradients.*—Of a total open mileage of 2,782·62 miles on the system, 1·32 miles are on the ruling gradient of 1 in 80, on the 5′ 6″ gauge; 3·40 miles on 1 in 40 on the 3′ 3⅜″ gauge and 5·34 miles on 1 in 150 on the 2′ 6″ gauge railway.

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History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
36	(*a*)	**BUKHTIARPORE-BEHAR LIGHT—** *(2′ 6″ gauge.)*				
		Bukhtiarpore on the East Indian railway to Behar	30-5-01	* May or June 1903.	18·75	
		TOTAL, BUKHTIARPORE-BEHAR	...	...	...	18·75

* Probable date of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Bukhtiarpore-Behar Light railway.**—

(*a*) The Bukhtiarpore-Behar Light railway is being constructed and will be worked on the terms in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement.—(Between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

(*b*) The general conditions are as follows:—

(i) *Government aid.*—In addition to land, which has been provided free of charge, except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

(ii) *Currency of contract.*—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, *viz.*, upon the expiration of twenty-one years from the date of the order of the Local Government authorising the construction of the line by giving six months' notice, or at intervals of seven years thereafter, the value to be calculated at twenty years' purchase of the average net profits to the Company during the four years preceding the transactions, together with a bonus of 20 per cent. thereon.

(iii) *Terms of working.*—Any surplus profits in excess of four per cent. on share capital, *plus* not more than 4 per cent. on debenture capital, will be equally divided between the District Board and the Company.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(v) *General remarks.*—The line is to be laid as far as possible on the District road.

2. **Details of construction.**—

(*a*) *Permanent-way.*—30 lb. steel rails, Vignole's pattern, on cross sleepers of pyinkado.

(*b*) *Ballast.*—The line will be ballasted throughout.

(*c*) *Fencing.*—The line will not be fenced.

P. T. O.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
23	(*a*)	**BURMA—** (*3′ 3⅜″ gauge.*)				
		IRRAWADDY SECTION—				
		Rangoon to Prome	25-9-74	2-5-77	161·00	
		TOTAL, IRRAWADDY SECTION	...	...	...	161·00
		SITTANG SECTION—				
		Main line—				
		Rangoon to Pegu	23-5-81	4-2-84	46·25	
		Pegu to Pyuntaza		4-2-84	41·75	
		Pyuntaza to Nyaunglebin		4-2-84	5·00	
		Nyaunglebin to Toungoo		1-7-85	73·00	
		Total Main line	...	...	...	166·00
		Branches—				
		Suburban lines	25-9-74	1-3-80	6·00	
				15-7-90	3·00	
		Total Branches	...	...	...	9·00
		TOTAL, SITTANG SECTION	...	...	...	175·00
		MANDALAY SECTION—				
		Main line—				
		Toungoo to Thawutti	October 1886.	1-5-88	44·00	
		Thawutti to Pyinmana		1-5-88	15·00	
		Pyinmana to Yamethin		15-11-88	49·00	
		Yamethin to Mandalay		1-3-89	112·00	
		Total Main line	...	...	...	220·00
		Branches—				
		Meiktila branch—				
		Thazi to Meiktila Cantonment	1-1-92	10-5-93	12·89	
		Meiktila to Myingyan	Sept. 1898	15-11-99	57·21	
					70·10	
		Mandalay Shore Branch—				
		Mandalay to Mandalay shore	...	April 1889	2·50	
		Total Branches	...	...	...	72·60
		TOTAL, MANDALAY SECTION	...	...	...	292·60
		MU VALLEY SECTION—				
		Main line—				
		Sagaing to Shwebo	Sagaing to Kawlin 17-10-89	1-7-91	53·05	
		Shwebo to Wuntho	Kawlin to Nankan in Feb. and March 1891.	4-4-92	99·46	
		Wuntho to Nankan		1-11-94	15·46	
		Nankan to Mohnyin	Sept. 1892	21-10-95	74·35	
		Mohnyin to Mogaung		1-3-96	52·34	
		Mogaung to Myitkyina	Dec. 1895	1-1-98	36·63	
		Total Main line	...	...	...	331·29
						331·29
		Carried over	...	...	...	628·60

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Burma railways—
(*a*) The Burma railways are worked under the following contract—
Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.
(*b*) The general conditions of the contract are as follows:—
(i) *Government aid.*—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was also provided free of charge.
(ii) *Currency of contract.*—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract, on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause, the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.
(iii) *Power of Company to surrender contract.*—Nil.
(iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—
The equivalent of the interest paid for the half-year on any debentures issued by the Company;
The equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;
The equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government;
After payment of any interest above-mentioned which may remain unpaid any surplus, in a year ending on the 30th June, to be divided between Government and the Company, in the proportion of four-fifths to the former and one-fifth to the latter.
(v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.
(vi) *General remarks.*—The Burma Railway Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3′ 3⅜″ gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from the Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina, and a branch to Katha, whence there is communication by river with Bhamo.
2. Details of construction—
(*a*) *Permanent-way.*—The Irrawaddy line is laid with steel rails, 50lb. to the yard, for a double track from Rangoon to Insein (9 miles), the remaining 152 miles being laid for a single track with 50 lb. steel rails for 103 miles, 41¼ lb. steel for 29 miles, and 40 lb. iron for 20 miles. The Sittang line is laid with steel rails, 50 lb. to the yard, from Pazundaung to Deiku (81 miles), the remaining 85 miles being laid with rails, 41¼ lb. to the yard. The Mandalay line consists of 50 lb. flat-footed steel rails, with deep web fish-plates of Bessemer steel. The Thazi-Myingyan branch consists of steel rails, 41¼ and 50 lb. to the yard. The Mu Valley line consists of 41¼ lb. flat-footed steel rails, with the exception of the Alon branch, where the rails are mostly 50 lb. The Mandalay-Kunlong line is laid with 50 lb. steel rails. The Bassein-Henzada-Letpadan branch will be laid with steel rails, 50lb. to the yard. The sleepers throughout are generally of teak, pyinma and pyinkado.
(*b*) *Ballast.*—The ballast is either shingle or broken stone.
(*c*) *Tunnels.*—On the Mandalay-Kunlong section, there are two tunnels at the Gokteik Gorge, *viz.*, No. 1 tunnel, 345 feet, and coverings in the approach 60 and No. 2 tunnel, 490 feet.

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History of railways constructed and in progress

Class : No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
23	(*a*)	**BURMA**—*concld.*— (3′ 3⅜″ *gauge.*) Brought forward, .	...	...	...	628·60
		MU VALLEY SECTION—*concld.*				331·29
		Branches—				
		Sagaing to Alon	Sept. 1898	15-4-00	70·46	
		Myohaung branch—				
		Myohaung to Amarapura shore . . .	17-10-89	22-11-91	6·00	
		Katha branch—				
		Naba to Katha	...	2-10-95	15·00	
		Total Branches .	...	...		91·46
		TOTAL, MU VALLEY SECTION .	...	...	...	422·75
		MANDALAY-KUNLONG SECTION—				
		Myohaung to Sedaw	Oct. 1895	1-1-98	13·45	
		Sedaw to Maymyo		1-4-00	26·10	
		Maymyo to Nawnghkio		20-5-00	34·10	
		Nawnghkio to Hsipaw		1-6-01	53·25	
		TOTAL MANDALAY-KUNLONG SECTION .	...	...	...	126·90
		LETPADAN-BASSEIN SECTION—				
		Bassein to Henzada	7-9-99	15-12-02	82·25	
		TOTAL, BASSEIN-HENZADA-LETPADAN .	...	...	...	82·25
		TOTAL OPEN MILEAGE, BURMA .	...	...	...	1,260·50
		Lines under construction or sanctioned for construction—				
		MANDALAY-KUNLONG SECTION—				
		Hsipaw to Lashio	16-10-95	1-3-03	50·94	
		BASSEIN-HENZADA-LETPADAN—				
		Letpadan (on Irrawaddy line) to Tharrawa on the east bank of the Irrawaddy river . .	7-9-99	17-4-03	23·00	
		Henzada to Henzada shore			3·00	
		Total Lines under construction .	...	...		76·94
		DOUBLE LINE—MAIN LINE AND BRANCHES—				
		Rangoon to Kemmendine	...	30-10-89	4·20	
		Kemmendine to Insein	...	10-1-90	5·50	
		Myohaung to Mandalay	...	3-10-99	2·45	
		Total Double line .	...	...	12·15	
		GRAND TOTAL, BURMA .	...	...	...	1,337·44

on the 31st December 1902, alphabetically arranged.

	REMARKS.
2. **Details of construction**—*concluded.*	
(*d*) *Bridges.*	—On the Mandalay-Kunlong section, there is a long high viaduct at the Gokteik Gorge which consists of 10 spans of 120 feet, 7 spans of 60 feet, and 16 spans of 40 feet (2,260 feet), supported on piers formed of steel trestles in pairs 40 feet apart. The total length of the viaduct is 2,260 feet and the greatest height of rail level above ground 325 feet.
(*e*) *Fencing.*	—The line from Prome to Mandalay is fenced. The Mu Valley line is generally unfenced, except at a few stations. On the Mandalay-Kunlong section the line is not fenced.
(*f*) *Curves.*	—On the Mu Valley line there are in all 13 curves of a radius of 573 feet, the sharpest on the line; four on the Katha branch between miles 212 and 213·8, the total length being 1,568 feet, and 9 on the main line between miles 171 to 235 on the Nankhan-Mohyin section, 3,790 feet long.
(*g*) *Gradients.*	—Of a total open mileage of 1,260·50 miles, 9·81 miles are on the ruling gradient of 1 in 25.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
5	(*o*)	**CAWNPORE-BURHWAL—** (*See* Oudh and Rohilkhand system, page 372.)				
2	(*e*)	**COOCH-BEHAR—** (*See* Eastern Bengal system, page 314.)				
6	(*h*)	**DANDOT LIGHT—** (*See* North Western system, page 368.)				
29	(*a*)	**DARJEELING-HIMALAYAN—** *(2' 0" gauge.)*				
		Siliguri to Kurseong	1879	23-8-80	31·75	
		Kurseong to Sonada		1-2-81	9·50	
		Sonada to Ghum		5-4-81	5·87	
		Ghum to Darjeeling		4-7-81	3·63	
		Darjeeling to the Darjeeling bazar		16-6-86	0·25	
		TOTAL, DARJEELING-HIMALAYAN	...	...	...	51·00
1	(*b*)	**DELHI-UMBALLA-KALKA—** (*See* East Indian system, page 322.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Darjeeling-Himalayan railway—**

(*a*) The Darjeeling-Himalayan railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and Franklin Prestage, Esq.), for construction, maintenance and working.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—Government undertake to pay the Company such sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road are also granted free of cost.

(ii) *Currency of contract.*—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to them for permanent improvements to the road or works connected with it. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment with an additional bonus of 20 per cent. over and above such value.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.

(v) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks.*—The line is laid for a great part of its length along the cart road. The road has almost continuous curves and windings as it passes across the mountains.

2. **Details of construction—**

(*a*) *Permanent-way.*—The line, which was originally laid with iron rails, 30 lb. to the yard, on the plains, has been relaid with iron rails, 40 lb. to the yard. Steel rails, 41¼ lb. to the yard, are laid on the hill portion. Of the Terai, 2·70 miles have been renewed with 41¼ lb. steel rails. Sâl, oak and chestnut sleepers are in use, sâl only being used under the 41¼ lb. rails.

(*b*) *Ballast.*—The line is now ballasted up to the 9th mile, a portion of this length near Siliguri being laid with sand. Elsewhere the ballast is of gravel.

(*c*) *Curves.*—Of curves with radii varying from 60 feet (the sharpest) to 1,000 feet, there is a total length of 35·55 miles distributed over the line.

(*d*) *Gradients.*—Of a total open mileage of 51·00 miles, 3·63 miles are on the ruling gradient of 1 in 23.

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History of railways constructed and in progress

Class: Main.	Class: Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
15	(*a*)	**DEOGHUR—** (*3′ 3⅜″ gauge.*)				
		Baidyanath to Deoghur	October 1881	23-12-82	4·79	
		TOTAL, DEOGHUR .	...	...	...	4·79
20	(*d*)	**DHRANGADRA—** (*See* Bhavnagar-Gondal-Junagad-Porbandar system, page 276.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

	Remarks.
1. Deoghur railway—	
(*a*) The Deoghur railway is worked under the following contract :—	
Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.	
(*b*) The general conditions of the contract are as follows :—	
(i) *Government aid.*—Land alone was provided free of charge.	
(ii) *Terms of contract.*—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.	
(iii) *Currency of contract.*—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption. Government may also determine the contract after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with an additional bonus not exceeding 20 per cent. of such value.	
(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.	
2. Details of construction.—	
(*a*) *Permanent-way.*—The permanent-way is laid with 36 lb. steel rails on wooden sleepers.	
(*b*) *Ballast.*—The line is ballasted throughout.	
(*c*) *Fencing.*—The line is unfenced.	
(*d*) *Curves.*—The sharpest curve has a radius of 2,640 feet and extends over a length of 3,000 feet.	
(*e*) *Gradients.*—Of a total open mileage of 4·79 miles, 3·50 miles are on the ruling gradient of 1 in 80.	

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Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		DIBRU-SADIYA SYSTEM— *(3′ 3⅜″ gauge.)*			Miles.	Miles.
13	(*a*)	DIBRU-SADIYA—				
		Main line—				
		Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh, eastward as far as the Dinjan stream	1881	Aug. 1882	15·00	
		Dinjan stream to Makum Junction		16-7-83	23·50	
		Makum Junction to Dihing bridge		2-5-84	23·00	
		Total Main line	...	...	...	61·50
		Branch—				
		Talap branch—				
		Makum Junction to Dum-Duma	1881	2-5-84	10·00	
		Dum-Duma to Talap		5-2-85	6·00	
		Total Branch	...	...	...	16·00
		TOTAL, DIBRU-SADIYA	...	...	...	77·50
13	(*b*)	LEDO AND TIKAK-MARGHERITA— *(3′ 3⅜″ gauge.)*				
		Main line—				
		Dihing bridge to Ledo	...	17-2-84	7·50	
		Namdang branch—				
		Margherita to Namdang	...	1-1-01	3·50	
		TOTAL, LEDO AND TIKAK-MARGHERITA	...	...	...	11·00
		GRAND TOTAL, DIBRU-SADIYA SYSTEM	...	...	...	88·50

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Dibru-Sadiya railway system is made up of—

	Open line. Miles.
(*a*) Dibru-Sadiya railway (3′ 3⅜″ gauge)	77·50
(*b*) Ledo and Tikak-Margherita railway (3′ 3⅜″ gauge)	11·00
TOTAL	88·50

2. **Dibru-Sadiya railway—**

(*a*) The Dibru-Sadiya railway is worked under the following contracts:—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881.—Contract modifying that of 1880.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government guarantee payment of a subsidy, twelve months after opening of main line throughout or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line, not exceeding in any year Rs. 80,000. Similarly, Government guarantee a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The free use of public roads is also provided for.

(ii) *Currency of contract.*—If the Company fail to fulfil their obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. If the Company do not maintain or work the railway for any time over fourteen days in any year, Government can deduct from the subsidy Rs. 210 in the case of the main line and Rs. 262 in the case of both main line and Makum branch each day, and in default Government will be discharged from all liabilities or obligations under this contract and can call on the Company to remove all rails, etc., and give possession of the lands, roads, etc., the Company bearing all expense in restoring the same to their original condition. Government may also determine* contract, on giving 12 months' notice (clause 19 of contract dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

* NOTE.—The Company having waived all their rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—The Company to maintain the railway and the road on which the rails are laid and the rolling-stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

(v) *Rates and fares.*—To be approved by Government from time to time while subsidy is payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

3. **Ledo and Tikak-Margherita railway—**

(*a*) The Ledo and Tikak-Margherita railway is worked under the following:—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms—contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

(*b*) The general conditions are as follows:—

(i) *Government aid.*—Nil.

(ii) *Currency of contract.*—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles and for a further term of 30 years within an area of at least 4 square miles.

(iii) *Power of Company to surrender contract.*— Nil.

(iv) *Terms of working.*—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it, all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings, *plus* 5 per cent. on the gross earnings of the colliery for rolling-stock.

(v) *Rates and fares.*—Certain rates have been sanctioned by Government for the carriage of goods.

(vi) *General remarks.*—The working of the branch was taken over by the Dibru-Sadiya railway from the 1st January 1897.

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Class: No.		Name and sections of railways.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		DIBRU-SADIYA SYSTEM—*concld.*				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

	REMARKS.
4. Details of construction—	
(*a*) *Permanent-way*—	
	Dibru-Sadiya railway.—The line throughout was originally laid with steel rails, 41½ lb. to the yard, but these are now gradually being replaced by 50 lb. steel rails. The sleepers are chiefly uriam; but about 30,000 cast iron plate sleepers of the Denham and Oliphera type are distributed throughout the main line, three being put in to each rail length.
	Ledo and Tikak-Margherita railway.—The line is laid with 50 lb. steel rails on uriam sleepers.
(*b*) *Ballast*—	*Dibru-Sadiya railway*—The line is unballasted for one mile from Lower Ghât, and for 16 miles between Makum junction and Talap. On the rest of the line, broken stone ballast has been used.
	Ledo and Tikak-Margherita railway.—The main line is three-fourths ballasted, but the Namdang branch is unballasted.
(*c*) *Fencing.*—The system is unfenced, with the exception of a short length at Dibrugarh.	
(*d*) *Curves.*—There are no curves under a radius of 600 feet.	
(*e*) *Gradients.*—Of a total open mileage of 88·50 miles, 0·53 mile is on the ruling gradient of 1 in 117.	

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Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
38	(*a*)	**DWARA-THERRIA LIGHT—** *(2' 6" gauge.)*				
		Dwara to Maolong	15-5-02	...	*19·50	
		Maolong to Therria				
		Total, Dwara-Therria Light .	...	...	...	19·50

* Commencement of work on the Maolong-Therria section not yet authorised.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

	REMARKS.
1. **Dwara-Therria Light railway—**	
(*a*) The Dwara-Therria Light railway is being constructed by the promoter, Mr. G. L. Garth, and will be worked by the promoter or any Company which may be formed by him under—	
Terms—Contained in Notification issued by the Chief Commissioner of Assam under No. 44 of 14th August 1902.	
(*b*) The general conditions are as follows :—	
(i) *Government aid.*—Land to be provided free of cost.	
(ii) The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract, and take over the railway, with all its equipments, buildings and property, upon giving two years' previous notice, and on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.	
(iii) *Rates and fares.*—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Chief Commissioner.	
2. **Details of construction—**	
(*a*) *Permanent-way.*—The rails on the Dwara-Maolong section will be 41½ lb., and on the Maolong-Therria section 30 lb., to the yard.	

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.. History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
2	(*a*)	**EASTERN BENGAL SYSTEM—**				
		EASTERN SECTION—				
		(*5′ 6″ gauge.*)				
		Main line—				
		Calcutta to Ranaghat	16-4-59	29-9-62	45·25	
		Ranaghat to Jagati Junction		15-11-62	62·00	
		Jagati Junction to 145th mile	1865-66	1-1-71	37·82	
		Total Main line	16-4-59	...	...	145·07
		Branches—				
		Jagati Junction to river Ganges (*Kooshtea branch.*)	...	16-2-64	3·77	
		Kooshtealoop line	...	1-8-81	1·17	
		Canal Junction to Chitpore (*Chitpore branch*)	12-4-73	25-8-73	1·88	
		Portion in Chitpore yard for goods traffic	...	13-4-88	0·12	
		Panchooria Junction to new Goalundo	...	22-10-98	5·46	
		Mile 145 to Panchooria Junction	...	1-4-90	3·16	
		Panchooria Junction to Shivarampore	Feby. '97	20-10-98	8·77	
		Shivarampore to Faridpore		9-4-99	7·43	
		Belgachhi to the Ganges	Feby. '96	27-10-98	2·30	
		Bhydea Junction to Borat	...	7-6-97	3·17	
		Churni Extension	...	1-1-02	1·50	
		Poradaha branch—				
		Poradaha to Bhairamara	4-4-76	19-1-78	11·79	
		Bhairamara to Golabnuggur (Damukdia)	22-9-83	8-12-83	8·33	
		Goalbathan Extension	...	1-1-02	2·28	
		Total Branches	...	...	...	61·13
		TOTAL, EASTERN SECTION	...	...	...	206·20
		SOUTHERN SECTION—				
		(*5′ 6″ gauge.*)				
		Main line—				
		Calcutta to Champahati	...	2-1-62	15·00	
		Champahati to Port Canning	...	15-5-63	12·79	
		Junction with Eastern section	...	15-8-85	0·41	
		Bansra diversion	Jany. 1900	5-3-00	0·25	
		Bansra diversion extension	...	17-11-02	0·75	
		Total Main line	...	...	...	29·20
		Branches—				
		Diamond Harbour branch—				
		Sonarpur to Baruipur	9-9-80	10-6-82	5·30	
		Baruipur to Magra Hat		18-12-82	9·55	
		Magra Hat to Diamond Harbour	...	25-4-83	12·69	
		Diamond Harbour towards Hara fort	...	25-4-83	0·42	
					27·96	
		Budge Budge branch—				
		Ballygunge to Budge Budge	Nov. '88	1-5-90	13·66	
		Total Branches	...	...	...	41·62
		TOTAL, SOUTHERN SECTION.	...	...	...	70·82
2	(*b*)	NORTHERN SECTION—				
		(*3′ 3⅜″ gauge.*)				
		Main line—				
		Sara to Atrai	12-2-74	19-1-78	38·75	
		Atrai to Jalpaiguri		28-8-77	134·25	
		Jalpaiguri to Siliguri		10-6-78	23·85	
		Total Main line	...	...	...	196·85
		Branches—				
		Rungpore branch—				
		Parbatipur Junction to Shampur	...	19-5-78	15·25	
		Shampur to Rungpore	12-2-74	2-7-78	7·50	
		Rungpore to Kaunia	...	1-6-79	11·25	
					34·00	
		Carried over	...	...	34·00	277·02
						196·85

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Eastern Bengal railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Eastern Bengal railway, 5′ 6″ gauge section . .	27·702	84·91	361·93
(*b*) Eastern Bengal railway, 3′ 3⅜″ gauge section . .	586·38	151·62	738·00
(*c*) Eastern Bengal railway, 2′ 6″ gauge section . .	34·78	...	34·78
(*d*) Brahmaputra-Sultanpur railway (3′ 3⅜″ gauge) .	59·37	...	59·37
(*e*) Mymensingh-Jamalpur-Jagannathganj railway (3′ 3⅜″ gauge)	53·14	...	53·14
(*f*) Cooch Behar railway (2′ 6″ gauge) . . .	33·60	...	33·60
	1,044·29	236·53	1,280·82

2. **Eastern Bengal State railway—**

(*a*) The Eastern Bengal railway is owned and worked by the State.

(i) *General remarks.*—The line from Calcutta to Port Canning was constructed under guarantee. The Company surrendered it to Government on the 1st April 1868.

The Eastern Bengal railway was acquired by the State on the 1st July 1884, and on the same date the Poradaha branch of the Northern Bengal State railway was permanently amalgamated with the Eastern Bengal State railway.

On the 1st April 1887, the Eastern Bengal and the Calcutta and South-Eastern railways were amalgamated with the Northern-Bengal, the Kaunia-Dharlla, the Dacca and the Assam-Behar railways, and these lines are now worked as one combined system, the railway being re-transferred from Provincial to Imperial control with effect from the 1st April 1892.

The Kaunia-Dharlla branch was constructed by the Bengal Government out of Provincial revenues. At Dhubri a connection is made with the Assam steamer services run by the India General and River Steam Navigation Company. The Dacca section is connected with the Eastern section by a ferry worked by the India General Steam Navigation Company between Goalundo and Narayanganj ghat.

The Northern and Eastern sections are connected by a steam ferry worked by the railway between Sara ghat and Damukdia ghat.

The East Indian railway is connected with the Bengal system of railways by a ferry worked by the East Indian railway across the Ganges between Manihari and Sahebgunge. A branch line runs northwards from Katihar Junction through Purnea and Kasba to Anchra ghat on the Kosi, opposite Khanwa ghat on the Kosi extension of the Tirhoot railway, where it is connected with the Tirhoot railway by a ferry worked by the Eastern Bengal State railway across the Kosi river.

3. **Brahmaputra-Sultanpur railway—**

(*a*) The Brahmaputra-Sultanpur railway is worked under the following contracts :—

Contracts of—3rd December 1896 (between the Secretary of State and the Brahmaputra-Sultanpur Branch Railway Syndicate) for the formation of a Company for the construction of the line.

8th January 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch railway Syndicate) for the subscription of capital for the construction of the line.

22nd February 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch railway Company) for the construction and working of the line.

P. T. O.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EASTERN BENGAL SYSTEM—*contd.*			Miles.	Miles.
		Brought forward	...	...	34·00	277·02
2	(*b*)	NORTHERN SECTION—*concld.* (*3′ 3⅜″ gauge*)—contd.				196·85
		Branches—concld.				
		Dinagepore branch—				
		Parbatipur to Chirir bandar	28-11-81	1-7-83	9·92	
		Chirir bandar to Dinagepore		16-5-84	8·75	
					18·67	
		Teesta bridge at Kaunia and approaches	6-3-97	1-4-01	4·42	
		Total, Branches	...	...	...	57·09
		Total, Northern section	...	...	...	253·94
		BEHAR SECTION—				
		Main line—				
		Manihari to Katihar	...	1-4-87	16·00	
		Katihar to Rayganj	...	1-7-89	37·49	
		Rayganj to Dinagepore	...	15-2-88	32·68	
		Junction with the Bengal and North-Western railway at Katihar	...	8-3-01	0·69	
		Total Main line	...	...	...	86·86
		Branches—				
		Kosi branch—				
		Katihar to Kasba	...	1-4-87	22·10	
		Kasba to Forbesganj	...	1-7-89	36·81	
		Forbesganj to Ancharaghat	...	1-1-91	14·99	
					73·90	
		Barsoi-Kissenganj branch—				
		Barsoi to Kissenganj	June '91	15-12-92	35·11	
		Total Branches	...	...	...	109·01
		TOTAL, BEHAR SECTION	...	...	...	195·87
		DACCA SECTION— (*3′ 3⅜″ gauge.*)				
		Narayanganj ghat to Dacca	11-8-82	4-1-85	10·25	
		Dacca to Jaydebpur		1-8-85	19·65	
		Jaydebpur to Gafargaon		1-8-85	32·50	
		Gafargaon to Mymensingh		1-8-85	23·52	
		TOTAL, DACCA SECTION	...	...	...	85·92
		KAUNIA-DHUBRI SECTION— (*3′ 3⅜″ gauge*).				
		Teesta Junction to Mogalhat*	Sept. '99	1-4-01	12·04	
		Mogalhat to Gitaldaha Junction	...	2-1-02	1·86	
		Gitaldaha Junction to Dhubri	...	23-9-02	36·75	
		TOTAL, KAUNIA-DHUBRI SECTION	...	...	...	50·65
		KAUNIA-DHARLLA SECTION— (*2′ 6″ gauge*).				
		Teesta Junction to Kurigram†	...	18-7-81	14·99	
		TOTAL, KAUNIA-DHARLLA SECTION	...	...	...	14·99
		Cooch Behar-Santrabari extension (British section)— *2′ 6″ (gauge).*				
		South Bank of Kaljani river to Alipur Duar	Dec. '97	18-1-00	0·64	
		Alipur Duar to Raja Bhat Khawa		5-4-00	9·97	
		Raja Bhat Khawa to Jhainti		1-2-01	9·18	
		TOTAL, COOCH BEHAR-SANTRABARI EXTENSION (BRITISH SECTION)	...	...	...	19·79
		TOTAL OPEN MILEAGE, EASTERN BENGAL PROPER	...	...	...	898·18
		Carried over	...	...	...	898·18

* Converted from 2′ 6″ gauge. Original dates of sanctions and opening : 20th November 1875, and 6th February 1882, respectively.
† Consequent on the opening of the Kaunia-Dhubri extension, the section from Kurigram to Jatrapur was abandoned.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. Brahmaputra-Sultanpur railway—*concluded.*

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Interest is guaranteed at 3 per cent. on the Company's capital. Land was also provided free of charge.

(ii) *Currency of contract.*—Government may determine contract on 12 months' notice, either on the 31st December 1919, or at the end of a subsequent period of 10 years, or on the 31st December 1948, the Government paying, if contract is determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings during the five years prior to determination, not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), paying the total amount of such capital expenditure.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government charge for working 45 per cent. of the gross receipts of the Company's line. After providing from the net earnings for repayment to Government of interest at the rate of 3 per cent. per annum on the actual expenditure, the balance is divided in equal proportions between Government and the Company.

The Company were also allowed, until the minimum dividend of 3 per cent. was earned by the branch line, Rs. 5,000 for each year for or towards the office expenses and the expenses of management; and also all such legal expenses as are properly debitable to revenue.

Note.—The working expenses include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work" subject to a maximum charge on such account of Rs. 20 per mile in each half-year.

(v) *Rates and fares.*—To be arranged between Government and the working agency within the maximum and minimum rates in force on the Eastern Bengal State railway.

4. Mymensingh-Jamalpur-Jagannathganj railway—

(*a*) The Mymensing-Jamalpur-Jagannathganj railway is worked under the following contracts :—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj railway office from Calcutta to London.

(*b*) The general condition of the contracts are as follows :—

(i) *Government aid.*—Government will in respect of each year allow to the Mymensing-Jamalpur-Jagannathganj Railway Company, by way of rebate on the share attributable to the Eastern Bengal railway of the receipt from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic, except railway stores interchanged between the Eastern Bengal State railway system and the railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land also was provided free of charge.

(ii) *Currency of contract.*—Government may determine contract on 12 months' notice either on the 31st December 1919, or at the end of a subsequent period of 10 years or on the 31st December 1948, the Government paying, if contract is determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, not exceeding by more than 20 per cent. or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—After deduction of 45 per cent. of the gross earnings for working expenses, (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'minor work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

(v) *Rates and fares.*—To be arranged between Government and the working agency within the maximum and minimum rates in force on the Eastern Bengal State railway.

5. Cooch Behar railway—

(*a*) The Cooch Behar railway is worked under the following contract.

Contract—Approved in Government of India letter No. 106 R. T., dated 29th January 1897, and having effect from the 1st January 1896, between the Secretary of State and the Cooch Behar Durbar for working.

(*b*) The general conditions of the contract are as follows :—

(i) *Government aid.*—The line is the property of the Cooch Behar State.

(ii) *Currency of contract*—The Eastern Bengal State railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1896.

(iii) *Power of company to surrender contract.*—Nil.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EASTERN BENGAL SYSTEM—*concluded.*			Miles.	Miles.
		Brought forward	...	...	...	898·18
		Lines under construction or sanctioned for construction—				
		EASTERN SECTION—				
		(*5′ 6″ gauge.*)				
		Pachooria Junction to river Ganges	Dec. '96	...	†6·00	
		Extensions to Chitpore Terminus (Belgachi to Cossipore).	Mar. '01	* 31-3-03	1·66	
		Kancoorgachi Chord (Kancoorgachi to Gobra)	6-11-02	*30-6-05	2·25	
		Ranaghat to Murshidabad	20-6-02	*Dec. 1904	75·00	
					84·91	
		NORTHERN SECTION—				
		(*3′ 3⅜″ gauge.*)				
		Golakganj to Gowhati	9-12-02	...	151·62	
		Total lines under construction	...	...	...	236·53
		TOTAL EASTERN BENGAL PROPER	...	...	...	1,134·71
		DOUBLE LINE EASTERN AND SOUTHERN SECTIONS—				
		Calcutta to Naihati	July '84	1-8-86	23·23	
				21-3-87	0·26	
		Naihati to Kanchrapara	May '91	20-4-92	4·69	
		Kanchrapara to Ranaghat	Oct. '91	12-11-92	17·56	
		Ranaghat to Aranghata	Dec. '95	7-8-97	5·50	
		Aranghata to Bogoola		17-9-97	6·75	
		Bogoola to Shibnibash.		3-11-97	6·65	
		Shibnibash to Ramnagar		17-11-98	0·75	
		Ramnagar to Poradaha		17-9-97	9·50	
		Canal Junction to Chitpore		7-8-97	27·58	
		Sealdah to Ballygunge	July '85	13-4-88	1·88	
				20-10-88	3·50	
		Ballygunge to Dock Junction	Novr. '89	19-9-90	·036	
				20-11-93	4·00	
		Total double line, Eastern and Southern sections	...	...	¶ 112·21	
2	(*c*)	BRAHMAPUTRA-SULTANPUR—				
		(*3′ 3⅜″ gauge*).				
		Santahar to Bogra	Oct. '96	1-4-99	24·50	
		Bogra to Dewantola		5-4-00	22·02	
		Dewantola to Bonarpara		1-8-00	4·60	
		Bonarpara to Fulchhari		1-9-00	8·25	
		TOTAL, BRAHAMPUTRA-SULTANPUR	...	...	...	59·37
2	(*d*)	MYMENSINGH-JAMALPUR-JAGANNATHGANJ—				
		(*3′ 3⅜″ gauge*).				
		Mymensingh to Singhjani	Novr. '96	15-10-98	33·07	
		Singhjani to Jagannathganj		15-10-99	20·07	
		TOTAL, MYMENSINGH-JAMALPUR-JAGANNATHGANJ	...	...	...	53·14
2	(*e*)	COOCH BEHAR—				
		(*2′ 6″ gauge*).				
		Main line—				
		Gitaldaha to Manshahi Junction	28-9-91	15-9-93	18·82	
		Manshahi Junction to the town of Cooch Behar	30-8-95	15-12-98	3·22	
		Torsa bridge	...	16-5-00	0·11	
		Total Main line	...	...	...	22·15
		Branch—				
		Cooch Behar-Santrabari extension (*Native State section*)				
		Cooch Behar to temporary Alipur Duar (Kholta)	20-12-97	15-4-99	10·96	
		Temporary Alipur Duar (Kholta) to the south bank of the Kaljani river.		18-1-00	0·49	
		Total Branch	...	...	...	11·45
		TOTAL, COOCH BEHAR	...	...	...	33·60
		GRAND TOTAL, EASTERN BENGAL SYSTEM	...	...	...	1,280·82
		EAST COAST—				
		(*See* Bengal-Nagpur and Madras systems, pages 270 and 348)				

* Probable date of opening.
‡ Constructed but not opened.

REMARKS.

5. Cooch Behar railway—*concluded.*

(iv) *Terms of working.*—The Eastern Bengal State railway, for maintenance and working, to receive 45 per cent. of the gross earnings from stone traffic (the wagons for which are not provided by the Cooch Behar line) and 40 per cent. of other gross earnings in accordance with the arrangement approved in Government of India, letter No. 981 R. C., dated 29th July 1901, the balance being made over to the Cooch Behar State. All earnings beyond Mogal Hat to be credited to the Cooch Behar State railway.

Note.—A revised agreement is under consideration. The percentage of working charges includes any single item of capital expenditure classed as a 'minor work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year.

(v) *Rates and fares.*—The Eastern Bengal State railway administration have full control over rates and fares.

6. General remarks.—The following sections of the Eastern Bengal State railway are worked over by foreign lines:—Kidderpore Docks to Naihati, 34·50 miles, by the East Indian railway; Dum Dum Junction to Canal Junction, 1·61 miles; Canal Junction to Calcutta, 2·96 miles; Canal Junction to Chitpore, 2·00 miles; and Calcutta to Kidderpore Docks, 7·31 miles, by the Bengal Central railway.

7. Details of construction.—

(*a*) *Permanent-way.*—

On the Eastern section (5′ 6″) gauge, the rails are double-headed steel, 73 lb. and 75 lb. to the yard on cast iron plate and sal sleepers. The Faridpur branch is laid with second hand iron rails, 72lb. and 68lb. to the yard, on timber sleepers.

On the Damukdia branch the old iron rails are being replaced by 73 lb. steel rails removed from the main line. The sleepers are mostly cast iron bowls. The Diamond Harbour and Budge Budge branches are laid with steel rails, 64 lb. and 73 lb. to the yard, on cast iron sleepers, and the Canning branch with iron rails on cast iron and wooden sleepers.

On the 3′ 3⅜″ gauge portion the rails are flat-footed steel, 41½ lb. and 50 lb. and iron 40 lb. to the yard, laid chiefly on sal, creosoted pine, asna, ironwood, steel, teak, and cast iron sleepers.

On the 2′ 6″ gauge section, the rails are flat-footed. The Teesta-Kurigram branch is laid with steel rails, 25 lb. and iron rails 30 lb per yard on sal sleepers; and the British section of the Santrabari extension is laid partly with iron rails, 40 lb. per yard, and partly with steel rails, 41½ lb. per yard, on sal sleepers. The Cooch Behar State railway is laid for 18·82 miles with steel rails, 25lb. to the yard; for 1·83 miles with steel rails, 41½lb. to the yard, on pyinkado sleepers, and 12·95 miles with 40lb. iron rails on sal sleepers.

(*b*) *Ballast.*—

The 5′ 6″ gauge section is ballasted throughout with the exception of the Faridpur branch. The 3′ 3⅜″ gauge section is, with some few exceptions, ballasted throughout. The 2′ 6″ gauge section is laid without ballast.

(*c*) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Mahanaddy (between Barsoi and Lalmoni) 10 spans of 150 feet; Gorai (between Kaligunga and Kumarkali), 7 spans of 174·71 feet, 9 spans of 43·69 feet; and 2 spans of 18 feet (1,759 feet), Teesta (between Kaunia and Teesta, 13 spans of 150 feet (2,116·40 feet); Dharla (between Mogalhat and Gitaldaha junction) 10 spans of 150 feet (1,620 feet) and Sankos, 9 spans of 150 feet (1,458 feet).

(*d*) *Fencing.*—

Eastern Bengal State railway.—The Eastern section is fenced throughout; and the total length of fencing provided on the Southern section, including the Budge Budge extension, is 52·07 miles. The Canning branch is unfenced. The whole of the Northern section is fenced, except the Kaunia-Dharla section. The Cooch Behar-Santrabari extension (British section) is unfenced; and the Dacca section is unfenced except at stations and for 13½ miles from Narayanganj. The Behar section is fenced throughout, with the exception of the Barsoi-Kissenganj branch. The Brahmaputra-Sultanpur, Mymensingh-Jamalpur-Jagannathganj and the Cooch Behar State railways are unfenced, except at stations and through the towns of Bogra and Mymensingh.

(*e*) *Curves.*—Several curves under a radius of 1,000 feet occur on the Kaunia-Dharla section, their radii varying from 425 to 955 feet with an aggregate length of 6,580 feet or 1·25 miles. On the Kaunia-Dhubri section the sharpest curve has a radius of 716 feet and is 0·11 mile in length. On the British section of the Santrabari extension, there is a curve of 637 feet radius.

(*f*) *Gradients.*—Of a total open mileage on the system, of 1,044·29 miles 2·45 miles are on the ruling gradient of 1 in 300, on the 5′ 6″ gauge; 1·20 miles on the ruling gradient of 1 in 162 on the 3′ 3⅜″ gauge, and 0·37 mile on the ruling gradient of 1 in 50 on the 2′ 6″ gauge Cooch Behar State railway.

¶ Excluding 2·99 miles from Kancoorgachi to Dum Dum Junction and 1·66 miles of the Extensions to Chitpore terminus, under construction.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EAST INDIAN SYSTEM— (*5′ 6″ gauge.*)			Miles.	Miles.
1	(*a*)	EAST INDIAN—				
		Main line—				
		Howrah to Hooghly	Jany. '51	15-8-54	23·23	
		Hooghly to Pundooah		1-9-54	14·31	
		Pundooah to Khana junction		3-2-55	36·94	
		Khana junction to Raneegunge		3-2-55	45·71	
		Raneegunge to Siarsol	...	21-7-63	1·70	
		Siarsol to Sitarampur	...	1-1-65	15·15	
		Sitarampur to Luckeeserai junction	Feby. '66	1-1-71	124·64	
		Luckeeserai to Dinapore	...	17-11-62	82·42	
		Dinapore to Moghal Sarai		22-12-62	125·92	
		Moghal Sarai to Mirzapur		1-1-64	39·28	
		Mirzapur to south bank, Jumna		4-4-64	52·64	
		Jumna bridge to Allahabad		15-8-65	2·75	
		Allahabad to Cawnpore	...	3-3-59	119·47	
		Cawnpore to Etawah		1-7-61	86·46	
		Etawah to Shikohabad		13-11-61	34·39	
		Shikohabad to Tundla junction		1-4-62	22·92	
		Tundla junction to Aligarh		1-3-63	48·56	
		Aligarh to Chola (Bulandshahr Road)		1-4-64	35·54	
		Chola to Delhi (south bank, Jumna)		1-8-64	41·27	
		Delhi terminus		1-1-67	1·78	
					955·08	
		Loop line—				
		Khana junction to river Adjai	...	3-10-58	19·00	
		River Adjai to Sainthia		3-9-59	25·12	
		Sainthia to Tinpahar		15-10-60	76·12	
		Tinpahar to Bhagalpur		1-11-61	69·12	
		Bhagalpur to Jamalpur		10-2-62	32·62	
		Jamalpur to Luckeeserai		17-11-62	28·41	
					250·39	
		Total Main and Loop lines	...	...	...	1,205·47
		Branches on main line—				
		Bhadreswar branch—				
		Bhadreswar junction to the river bank	...	6-12-82	2·60	
		Hooghly bridge branch—				
		Hooghly junction to Naihati	14-1-84	15-3-87	4·22	
		Ondal loop—				
		Ondal to Babasole	July '82	1-5-64	2·03	
		Babasole to Mangalpur		1-1-63	2·74	
		Mangalpur to Toposi		2-2-63	2·65	
		Toposi to Ikrah junction		15-4-94	2·42	
		Ikrah junction to Gourangdi		1-6-95	14·16	
		Gourangdi to Alipur	29-3-91	30-3-95	7·54	
					31·54	
		Ikrah branch—				
		Ikrah junction to the Ondal loop	July '82	15-4-94	8·92	
		Jherriah branch—				
		Sitarampur to Barakar	9-3-92	1-1-65	5·43	
		Barakar to Katrasgarh	...	*20-5-94	33·80	
					39·23	
		Sitarampur-Damohani extension—				
		Mile 132 from Howrah to Sitarampore	13-7-99	15-4-02	6·99	
		Salanpur branch—				
		Salanpur to Shamdi	9-3-92	7-9-94	4·29	
				1-1-97	1·24	
					5·53	
		Carried over	...	...	99·03	1,205·47

* The first 7 miles of this extension were worked for coal traffic from the 1st August 1893.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The East Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) East Indian railway (5′ 6″ gauge)	1,923·35	179·62	2,102·97
(*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge) . .	162·24	...	162·24
(*c*) South Behar railway (5′ 6″ gauge)	78·76	...	78·76
(*d*) Tarkessur railway (5′ 6″ gauge)	22·23	...	22·23
(*e*) *Rewah State railway (2′ 6″ gauge)* . . .	...	31·81	31·81
Total .	2,186·58	211·43	2,398·01

2. **East Indian railway—**

(*a*) The East Indian railway is worked under the following contracts:—

Contracts of—22nd December 1879—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hugli); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Bankipur junction to the right bank of the Ganges at Digha Ghat); Jherriah (Barakar to the Jherriah coal-fields); Toposi colliery (Toposi to Kharabad, Nundi to Panuria and Salanpur to Shamdi; Gya (Bankipur to Gya); and Azimganj (Nalhati to Azimganj.)

26th February 1896.—As to debenture capital.

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital sum representing deferred portion, *i.e.*, one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

(ii) *Terms of contract.*—The lines were purchased from the East Indian Guaranteed railway Company by the State in 1879, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

	£
* Company's stock at date of purchase ...	26,200,000
Premium of 25 per cent.	6,550,000
	32,750,000

(iii) *Currency of contract.*—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

NOTE.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

(iv) *Power of Company to surrender contract.*—See 2 *b* (iii) above.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EAST INDIAN SYSTEM—*continued.*			Miles.	Miles.
1	(*a*)	*Branches on main line*—concluded.				
		Brought forward	...	...	99·03	1,205·47
		Chanch branch—				
		From mile 144½ to Chanch	9-3-92 11-2-96	1-2-93 5-8-96	2·88 1·00	
					3·88	
		Pandra branch—				
		From mile 148¾ on Jherriah branch to Pandra	4-8-99	26-11-00	3·23	
		Damoodur branch—				
		Dheria Joba to the Damoodur river	15-1-94	30-6-95 15-7-96	8·00 1·77	
					9·77	
		Kurhurbaree branch—				
		Madhopur junction to Giridih	...	1-1-71	26·70	
		Mokameh Ghat branch—				
		Mokameh junction to Mokameh Ghat	...	1-5-83	3·70	
		Patna-Gya branch—				
		Bankipore junction to Bankipore	13-2-78	2-6-79	0·25	
		Bankipore to Jehanabad		21-4-79	28·95	
		Jehanabad to Gya		2-6-79	29·22	
					58·42	
		Baran-Daltonganj branch—				
		Sone East Bank (Baran) to Rajhara	16-5-97	3-5-02	67·30	
		Rajhara to Daltonganj		15-12-02	10·65	
					77·95	
		Dighaghat branch—				
		Bankipore junction to Dighaghat	30-7-84	2-4-85	5·53	
		Tarighat branch—				
		Dildarnagar junction to Tarighat	11-7-78	5-10-80	12·00	
		Moghal Sarai-Gya branch—				
		Moghal Sarai to Gya	...	1-3-00 1-5-02	125·48 0·94	
					126·42	
		Jubbulpore branch—				
		Naini junction to Jubbulpore	Feby. '63	1-8-67	223·58	
		Allahabad fort branch	...	3-3-59	2·34	
		Cawnpore city branch	...	15-2-79	0·88	
		Agra branch—				
		Tundla junction to Agra East Bank	...	1-4-62	13·35	
		Hathras city branch	...	1-11-98	5·58	
		Branches on loop line—				
		Azimganj branch—				
		Nalhati to Azimganj	...	15-7-92	27·23	
		Rajmehal branch—				
		Tinpahar junction to Rajmehal	...	15-10-60	7·00	
		Sakrighat branch—				
		Sakrigali junction to the river Ganges	...	1-1-94	1·99	
		Maharajpur branch	...	30-11-98	2·48	
		Sultangunge branch	22-3-93	6-5-95	1·14	
		Monghyr branch—				
		Jamalpore to Monghyr	...	10-4-62	5·68	
		Total Branches	...	...	...	717·88
		TOTAL OPEN MILEAGE, EAST INDIAN PROPER	...	...	...	1,923·35

REMARKS.

2. **East Indian railway**—*concluded.*

(*a*) *General conditions*—concluded.

(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to Provident Fund) up to a sum of 25 lakhs of rupees to be divided in proportion of four-fifths to Government and one-fifth to Company. Any excess over 25 lakhs of rupees to be divided in proportion of fourteen-fifteenths to Government and one-fifteenth to Company.

(vi) *Rates and fares.*—Certain maximum and minimum rates and fares have been fixed within which the Company is permitted to vary its rates.

3. **Delhi-Umballa-Kalka railway**—

(*a*) Delhi-Umballa-Kalka railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.

12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent. of gross earnings hitherto retained by Government.

24th July 1896, between Secretary of State and the Delhi-Umballa-Kalka Railway Company whereby the Secretary of State agreed to advance funds for capital expenditure up to Rs. 2,00,000 at 3½ per cent. per annum: the Company agreed to an allowance of Rs. 10,000 each half-year for capital works without requiring the sanction of the Delhi-Umballa-Kalka railway. Works costing Rs. 1,000 and under to be classed as 'Minor Works' and to be payable by the working agency: refunding the cost of certain works at Umballa station carried out by the Delhi-Umballa-Kalka railway the Company agreeing to pay interest on the expenditure at 3½ per cent. per annum.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3¼ per cent. on its share capital.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3¼ per cent. per annum on their share capital. Land was also provided free of cost.

(ii) *Currency of contract.*—The contract determines by the effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangements be made, Government may determine the contract on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent. to the Company. Surplus profits in excess of 3¼ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

(v) *Rates and fares.*—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum, rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EAST INDIAN SYSTEM—*continued.*			Miles.	Miles.
		Brought forward	...	...	...	1,923·35
		Lines under construction or sanctioned for construction—				
		Gya-Katrasgarh railway—				
		Manpur to 0·87 mile beyond Gurpa (Plains section)	20-6-02	March 1906,*	25·25	
		Mile 0·87 beyond Gurpa to Kodarma (Hill section)	15-10-02	March 1906,*	18·19	
		Kodarma to Hariharpur (Plateau section)	31-7-02	March 1906,*	56·35	
					99·79	
		Shikohabad to Farukhabad	7-11-02	...	65·82	
		Colliery lines—				
		Katrasgarh to Kanoodih	9-12-01	7-3-03	7·80	
		Jherriah to Dhanbaid	9-12-01	1-5-03	3·75	
		Tesra siding	9-12-01	*1-4-03	1·75	
		Northern half of the Mulkura-Katrasgarh cross connection	9-12-01	*1-5-03	0·71	
		Total lines under construction	...	...	...	179·62
		GRAND TOTAL, EAST INDIAN PROPER	...	...	...	2,102·97
		DOUBLE LINE—MAIN LINE AND BRANCHES—				
		Howrah to Serampore	...	10-3-57	11·74	
		Serampore to Chandernagore	...	1-2-58	8·38	
		Chandernagore to Hooghly	...	1-5-58	3·11	
		Hooghly to Magra	...	1-10-58	5·49	
		Magra to Pundooah	...	25-2-59	8·82	
		Pundooah to Burdwan	...	1-10-59	†28·72	
		Burdwan to Khana	...	1-1-59	8·22	
		Khana to Durgapur	...	1-6-70	31·35	
		Durgapur to Raneegunge	...	2-9-70	14·36	
		Raneegunge to Sitarampur	...	19-12-70	‡16·85	
		Sitarampur to Luckeeserai	...	1-1-71	124·64	
		Luckeeserai to Burhee	...	22-6-60	9·82	
		Burhee to Barh	...	22-2-68	27·10	
		Barh to Futwah	...	11-1-68	25·87	
		Futwah to Dinapore	...	20-3-67	19·63	
		Dinapore to Bihta	...	13-8-68	10·93	
		Bihta to Arrah	...	28-3-70	13·50	
		Arrah to Buxar	...	13-8-68	42·67	
		Buxar to Dildarnagar	...	15-4-82	22·46	
		Dildarnagar to Zamania	...	20-5-82	8·59	
		Zamania to Sakaldiha	...	20-9-82	16·28	
		Sakaldiha to Moghal Sarai	...	10-8-82	11·49	
		Hooghly bridge branch	...	15-3-87	4·22	
		Sitarampur to Barakar	...	6-3-01	9·76	
		Ghaziabad to Shahadara	20-10-99	20-2-02	8·13	
		Shahadara to east side of Jumna bridge near Delhi	20-10-99	1-7-02	2·57	
		TOTAL DOUBLE LINE	...	...	494·70	
		Carried over	...	...	...	2,102·97

* Probable date of opening.
† Of this, 2·20 miles (Boinchee to
‡ Of this, 0·55 mile (Kalipahari to

on the 31st December 1902, alphabetically arranged.

	REMARKS.
4. South Behar railway—	
(*a*) The South Behar railway is worked under the following contracts :—	
Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.	
22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.	
(*b*) The general conditions of the contracts are as follows :—	
(i) *Government aid.*—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land also was given free of cost.	
(ii) *Currency of contract.*—Government have power to determine the contract on the 31st June 1919, or at the end of any subsequent period of ten years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authorisation of the Secretary of State.	
(iii) *Power of Company to surrender contract.*—Nil.	
(iv) *Terms of working.*—For the first two years after the opening of any section, the cost of maintenance is to be a charge against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work') to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.	
(v) *Rates and fares.*—To be agreed upon from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the East Indian railway.	
5. Tarkessur railway—	
(*a*) The Tarkessur railway is worked under the following contracts :—	
Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.	
15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.	
1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.	
(*b*) The general conditions of the contract are as follows :—	
(i) *Government aid.*—Land was provided free of cost.	

Debipur) are laid with a third track.
Noonia) is laid with a third track.

P. T. O.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		EAST INDIAN SYSTEM—*continued.*				
		Brought forward .	...	...	...	2,102·97
I	(*b*)	DELHI-UMBALLA-KALKA—				
		(5′ 6″ gauge.)				
		Delhi to Kalka	...	1-3-91	162·24	
		TOTAL, DELHI-UMBALLA-KALKA .	...	...	...	162·24
I	(*c*)	SOUTH BEHAR—				
		(5′ 6″ gauge.)				
		Luckeeserai to Gya	...	5-7-99	78·76	
		TOTAL, SOUTH BEHAR .	...	...	...	78·76
I	(*d*)	TARKESSUR—				
		(5′ 6″ gauge).				
		Seoraphuli to Tarkessur	20-2-83	1-1-85	22·23	
		TOTAL, TARKESSUR .	...	...	...	22·23
		Lines under construction or sanctioned for construction—				
I	(*e*)	REWAH—				
		(2′ 6″ gauge).				
		Rewah to Sutna	18-5-97	*	31·81	
		TOTAL, REWAH .	...	...	...	31·81
		GRAND TOTAL, EAST INDIAN SYSTEM .	...	...	...	2,398·01

* Commencement of work not yet authorized.

on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Tarkessur railway—*concluded.*

(*b*) *General conditions*—concld.

(ii) *Currency of contract.*—The contract of 1883 terminates on the 7th September 1982, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government are to pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—The East Indian Railway Company supply the necessary rolling-stock and work the line in consideration of the following half-yearly payments :—

Working expenses (which include any single item of capital expenditure subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole, five per cent. of the gross earnings as hire of rolling-stock, a contribution to the East Indian railway Provident Fund in accordance with the rules of the fund, and one-fifth of the balance of the gross earnings above charges.

The remaining four-fifths of the balance are paid to the Tarkessur Railway Company.

(v) *Rates and fares.*—Certain maxima have been fixed, and the Company are authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.

6. Rewah.—The actual construction of the line has not yet been commenced by the Rewah Durbar.

7. General remarks.—The East Indian railway works over the following lengths of foreign lines :—Agra East Bank to Agra Fort (1 mile) of the Rajputana-Malwa railway; and Kidderpore Docks to Naihati (34·50 miles) of the Eastern Bengal State railway. The following portions of the East Indian railway are worked over by other lines :—at Katni (0·55 mile) by the Bengal-Nagpur railway; Agra to Tundla (12·75 miles), at Cawnpore (1·92 miles), at Manikpur (0·63 mile), and at Katni (0·42 mile) by the Indian Midland railway; and Ghaziabad to Delhi (13 miles) by the North Western and Oudh and Rohilkhand State railways. A length of this railway from Delhi to the junction with the Southern Punjab railway, 1·33 miles, is worked over by the North Western State railway.

8. Details of construction—

(*a*) *Permanent-way.*—

East Indian railway.—The main line is laid with wooden and cast iron plate sleepers. The rails vary in weight from 74 lb. to 85 lb. to the yard. On the Ondal loop, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Jherriah branch, the rails are iron and steel and are laid on timber and cast iron plate sleepers. On the Giridih branch, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Patna-Gya branch, the first 29 miles are laid with 64 lb. rails. On the Moghal Sarai-Gya extension, double headed 75 lb. rails are laid with cast iron chairs and timber sleepers. The Jubbulpore branch is laid with 75 lb. steel rails on timber and cast iron plate sleepers. The Azimganj branch is laid with 82 lb. rails on cast iron plate sleepers.

Delhi-Umballa-Kalka railway.—The permanent-way consists of double-headed steel rails, 75 lb. to the yard, laid on cast iron plate and wooden sleepers.

South Behar railway.—The permanent-way is of the East Indian railway standard design with double-headed rails, 75 lb. to the yard, laid half with cast iron chairs and timber sleepers and half with cast iron plate sleepers.

Tarkessur railway.—The permanent-way consists of 75 lb. rails and fastenings of wrought iron purchased from the East Indian railway laid on cast iron plate sleepers.

(*b*) *Ballast.*—The line is ballasted throughout with stone.

(*c*) *Tunnels.*—

East Indian railway.—The only important tunnel is the "Monghyr," 900 feet in length, at mile 295¾ on the loop line, between Bariarpur and Jamalpur.

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Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		EAST INDIAN SYSTEM—*concluded.*				
8	(*l*)	**GAEKWAR'S DABHOI—** (*See* Bombay, Baroda and Central India system, page 286.)				
8	(*h*)	**GAEKWAR'S MEHSANA—** (*See* Bombay, Baroda and Central India system, page 286.)				
8	(*f*)	**GODHRA-RUTLAM-NAGDA—** (*See* Bombay, Baroda and Central India system, page 280.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
8. Details of construction—*concld.*
(*d*) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Sone (between Bihta and Koilwar), 28 spans of 150 feet (4,726 feet); Jumna (Allahabad), 14 spans of 200 feet, 2 spans of 30 feet (3,150 feet); Jumna (Delhi), 12 spans of 211½ feet and 2 spans of 30 feet (2,697 feet); Jubilee (between Hooghly and Naihati), 2 spans of 523·67 feet and 1 span of 106½ feet with approach viaducts of 64 spans of 10·83 feet; 74 spans of 29·17 feet; 1 span of 25·83 feet; 1 span of 43 feet and 1 span of 48 feet (4,932·25 feet); Tonse (between Meja Road and Karchana), 7 spans of 150 feet and 2 spans of 32 feet (1,194 feet); Kuel (Luckeeserai), 9 spans of 150 feet; Barakar, 5 spans of 150 feet, 6 spans of 100 feet; 1 span of 200 feet and 5 spans of 29·25 feet in viaducts (1,850 feet); Sone (Dehri), 93 spans of 100 feet (10,052 feet); Phulgu (between Manpur and Gya); 18 spans of 100 feet and 1 span of 30 feet (2,064 feet); Soma (between Luckeeserai and Gya), 3 spans of 60 feet and 30 spans of 30 feet; and Sukri (between Worsleyganj and Narwadah), 16 spans of 60 feet.
(*e*) *Fencing.*—The line is double fenced throughout, excepting the Azimgarh branch and Barakar-Katrasgarh section of the Jherriah branch, which are unfenced, and also the Moghal Sarai-Gya-Luckeeserai section which is fenced near villages, round station yards and for a short distance near each level crossing only.
(*f*) *Curves.*—There are no curves of less than 1,000 feet radius.
(*g*) *Gradients.*—Of a total open mileage of 2,186·58 miles on the system, 3·98 miles are on the ruling gradient of 1 in 40.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		GREAT INDIAN PENINSULA SYSTEM—			Miles.	Miles.
		(5′ 6″ gauge.)				
7	(*a*)	GREAT INDIAN PENINSULA—				
		NORTH-EAST LINE—				
		Main line—				
		Victoria terminus to Bori Bandar	31-10-50	1-1-82	0·19	
		Bori Bandar to Thana		18-4-53	20·54	
		Thana to Kalyan (Thana to Persick)	28-3-51	1-5-54	12·65	
		Thana to Kalyan (Persick to Kalyan)	22-5-52			
		Kalyan to Vasind	20-5-53	1-10-55	16·14	
		Vasind to Asangaon	25-3-67	6-2-60	3·75	
		Asangaon to Kasara		1-1-61	21·84	
		Kasara to Igatpuri (Thull Ghat)		1-1-65	9·89	
		Igatpuri to Nasik		28-1-61	31·43	
		Nasik to Chalisgaon		1-10-61	87·24	
		Chalisgaon to Jalgaon		6-10-62	57·48	
		Jalgaon to Bhusaval		20-5-63	15·01	
		Bhusaval to Burhanpur		20-11-65	33·91	
		Burhanpur to Khandwa		3-9-66	42·78	
		Khandwa to Bir	1858	17-2-68	21·15	
		Bir to Itarsi		1-1-70	89·27	
		Itarsi to Sohagpur		1-2-70	30·69	
		Sohagpur to Jubbulpore		8-3-70	121·14	
		Total Main line	...	...	...	615·10
		Branches—				
		Chalisgaon-Dhulia branch—				
		Chalisgaon to Dhulia	15-7-97	15-10-00	34·95	
		Jalgaon-Amalner branch—				
		Jalgaon to Dharangaon	Jany. '98	20-2-00	18·26	
		Dharangaon to Amalner		4-4-00	16·00	
					34·26	
		Nagpur branch—				
		Bhusaval Junction to Malkapur	27-9-58	20-5-63	30·05	
		Malkapur to Shegaon		24-10-64	32·53	
		Shegaon to Badnera		18-12-65	72·67	
		Badnera to Pulgaon		16-7-66	40·29	
		Pulgaon to Sindi		5-11-66	38·27	
		Sindi to Nagpur		20-2-67	29·44	
					243·25	
		Wardha Coal branch—				
		Wardha to mile 490·20	5-2-72	1-2-79	18·95	
		Mile 490·20 to mile 512·64	1-4-74	*24-12-75	22·44	
		Mile 512·64 to Warora		*26-4-76	4·00	
					45·39	
		Mohpani branch—				
		Gadarvada to Mohpani	13-2-71	†3-9-72	12·47	
		Mohpani to Gotitoria	25-2-96	2-11-96	1·07	
		Mohpani to new coal fields	12-3-96	3-6-00	0·14	
					13·68	
		Total Branches	...	...	...	371·53
		TOTAL, NORTH-EAST LINE	...	...	...	986·63
		Carried over	...	...	...	986·63

* For coal traffic only; subsequently opened for public traffic as follows: mile 489·69 to mile 492·25 on
† For coal traffic only; opened for public traffic on 1st January 1881.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Great Indian Peninsula railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Great Indian Peninsula railway	(5′ 6″ gauge)	1,548·17	...	1,548·17
(*b*) Khamgaon railway	(5′ 6″ gauge)	7·97	...	7·97
(*c*) Amraoti railway	(5′ 6″ gauge)	5·49	...	5·49
(*d*) Indian Midland railway	(5′ 6″ gauge)	796·53	8·85	805·38
(*e*) Bina-Goona-Baran railway	(5′ 6″ gauge)	145·63	...	145·63
(*f*) Bhopal-Ujjain railway	(5′ 6″ gauge)	113·27	...	113·27
(*g*) Bhopal-Itarsi railway	(5′ 6″ gauge)	57·39	...	57·39
(*h*) Gwalior Light railway	(2′ 0″ gauge)	126·14	57·86	184·00
	Total	2,800·59	57·86	2,867·30

2. **Great Indian Peninsula railway—**

(*a*) The Great Indian Peninsula railway is worked under the following contract :—

Contract of—21st December 1900—Contract for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

(*b*) The general conditions of the contract are as follows :—

(i) *Government aid.*—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company which is at present authorised at £ 2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum or at such other rate as may be agreed upon; or will be raised by the Company by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was also provided free; if acquired after 30th June 1900, is paid for from the capital of the undertaking.

(ii) *Terms of contract.*—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £ 40,781,568, * payable up to the 17th August 1948, in the form of a terminable annuity of £ 1,268,516.

	£
* Company's stock at date of purchase	34,859,218
Debentures and debenture stock	5,922,350
Total	40,781,568

(iii) *Currency of contract.*—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company for all debts and liabilities incurred under sanction.

(iv) *Power of Company to surrender contract*—Nil.

(v) *Terms of working.*—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(*a*) The working expenses, which will include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 25,000 in each half-year, and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(*b*) A sum of Rs. 1,00,00,000 which is payable to Government;

(*c*) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, $\frac{1}{10}$ths of the surplus are paid to the Secretary of State and $\frac{1}{20}$th to the Company. Provided that if the Company increase its new capital and issue further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{20}$th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

(vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

3. **Khamgaon and Amraoti railways—**

(*a*) The Khamgaon and Amraoti railways are worked under the following contract :—

Contract of—21st December 1900 (between the Secretary of State and the Great Indian Peninsula Railway Company) for working and maintenance.

16th June 1877, and mile 492·25 to Warora on 7th November 1877.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—*contd.*				
		Brought forward	...	...		986·63
7	(*a*)	SOUTH-EAST LINE—				
		Main line—				
		Kalyan to Palasdhari (Karjat) { Kalyan to Neral	13-5-54	12-5-56	30·61	
		Neral to Palasdhari	10-1-55			
		Palasdhari to Khandala (Bhore ghat)	7-7-55	14-5-63	13·20	
		Khandala to Lonavla (Bhore ghat)		14-6-58	2·35	
		Lonavla to Poona		14-6-58	39·66	
		Poona to Diksal	5-10-55	15-12-58	64·25	
		Diksal to Barsi Junction		23-10-59	50·60	
		Barsi Junction to Mohol		21-1-60	28·32	
		Mohol to Sholapur		6-6-60	20·51	
		Sholapur to Gulbarga	3-8-65	1-2-70	70·29	
		Gulbarga to the Kistna	Dec. '65	1-12-70	73·76	
		Kistna to Raichur		1-5-71	15·31	
		Total Main line	...	...	...	408·86
		Branches—				
		Dhond-Manmad branch—				
		Dhond to Ahmednagar	25-8-77	15-3-78	50·41	
		Ahmednagar to Manmad		17-4-78	95·03	
		Khopoli branch—			145·44	
		Palasdhari to Khopoli	30-1-55	12-5-56	7·24	
		Total Branches	...	...	...	152·68
		TOTAL, SOUTH-EAST LINE	...	...	...	561·54
		GRAND TOTAL, GREAT INDIAN PENINSULA PROPER	...	...	...	1,548·17
		DOUBLE LINE—NORTH-EAST LINE—				
		Victoria terminus to Bori Bandar	...	1-1-82	0·19	
		Bori Bandar to Thana	...	18-4-53	20·54	
		Thana to Kalyan	...	1-5-54	12·65	
		Kalyan to Vasind	...	22-10-66	16·15	
		Vasind to Atgaon	...	20-2-67	9·65	
		Atgaon to Kasara	...	25-4-67	15·94	
		Kasara to Igatpuri	...	1-1-65	9·89	
		Igatpuri to Nasik	...	10-1-69	31·43	
		Nasik to Chalisgaon	...	10-1-69	87·24	
		Chalisgaon to Kajgaon	...	10-1-69	11·86	
		Kajgaon to Pachora	...	17-3-69	16·05	
		Pachora to Maheji	...	27-5-69	9·14	
		Maheji to Bhadli	...	6-3-73	27·59	
		Bhadli to Bhusaval	...	6-6-73	7·84	
		Bhusaval to Bhusaval Junction	...	1-7-92	1·11	
		Bhusaval Junction to Khandwa (Abna Junction)	...	11-1-89	75·12	
		Bagra tunnel to Towa viaduct	...	1-2-70	0·74	
		Total Double line, North-East line	...	...	353·13	
		DOUBLE LINE—SOUTH-EAST LINE—				
		Kalyan to Palasdhari	...	25-7-70	30·61	
		Palasdhari to Khandala } Bhore ghat	...	14-5-63	13·20	
		Khandala to Lonavla }		14-6-58	2·61	
		Total Double line, South-East line	...	...	46·42	
		Carried over	...	...	399·55	1,548·17

	REMARKS.
	(*b*) The general conditions of the contract are as follows:—
	(i) *Government aid.*—These branches were constructed from the surplus revenues of the Berars and have under the agreement dated the 5th November 1902, between the British Government and His Highness the Nizam of Hyderabad, been leased in perpetuity to the former with the Assigned Districts from the 1st October 1902.
	(ii) *Currency of contract.*—The duration of the contract is up to the 30th June 1925.
	(iii) *Power of Company to surrender contract.*—Nil.
	(iv) *Terms of working.*—After deducting, as working expenses, a sum equal to the same percentage of gross receipts of the railway as obtains on the whole of the undertaking including branches, the balance to be paid over to Government.
	(v) *Rates and fares.*—Same rates and fares as are in force on the Great Indian Peninsula railway.
	4. Indian Midland railway—
	(*a*) The Indian Midland railway is worked under the following contracts:—
	Contract of—2nd October 1885—Indian Midland Railway Company's principal contract. 18th March 1890—Contract for the acquisition of the Scindia railway. 13th June 1896—Contract for the Saugor-Katni railway. 21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.
	(*b*) The general conditions of the contracts are as follows:—
	(i) *Government aid.*—Interest at 4 per cent. per annum in sterling is guaranteed on £ 3,000,000 share capital. On further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system, and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company only raising the amount required for expenditure in England. Land was also provided free.
	(ii) *Currency of contract—Indian Midland contract.*—The contract of 1885 may be determined by Government, by giving 12 months' previous notice, on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract, the Company is to hand over to Government the railway and all its belongings of every description and Government is to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900. But the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits (as stated below) remains in full force till the termination of either the contract of 1885 or that of 1900. *Scindia and Saugor-Katni railways' contracts.*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.
	(iii) *Power of Company to surrender contract.*—Nil.
	(iv) *Terms of working.*—From the gross earnings for any calendar year, will be deducted working expenses and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.
	(v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.
	(vi) *General remarks.*—The Indian Midland and Great Indian Peninsula railways were amalgamated and are being worked as one undertaking on behalf of the State from the 1st July 1900.
	5. Bina-Goona-Baran and Bhopal-Ujjain railways—
	(*a*) The Bina-Goona-Baran and Bhopal-Ujjain railways are worked under the following agreements:—
	Agreement of—15th July 1896, 4th August 1896, 4th August 1896, 12th May 1899 } (between the Government of Her Highness the Begum of Bhopal and that of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working. 20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working. 27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company) for working.
	(*b*) The general conditions of the agreements are as follows:—
	(i) *Government aid.*—The line from Bina to Baran is owned jointly by the Durbars of the Gwalior, Tonk and Kotah States; and that from Bhopal to Ujjain by the Bhopal and Gwalior States.
	(ii) *Currency of agreement.*—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—*contd.*				
		Brought forward . .	...	...	399·55	1,548·17
		DOUBLE LINE—NAGPUR BRANCH—				
		Bhusaval Junction to Nadgaon	...	11-1-89	17·72	
		Nadgaon to Shegaon	...	1-4-90	44·65	
		Total Double line, Nagpur branch .	...	...	62·37	
		GRAND TOTAL, DOUBLE LINE . .	...	...	461·92	
7	(*b*)	KHAMGAON. (*5′ 6″ gauge*).				
		Jalamb to Khamgaon	7-6-69	4-3-70	7·97	
		TOTAL, KHAMGAON . .	...	...	...	7·97
7	(*c*)	AMRAOTI— (*5′ 6″ gauge*).				
		Badnera to Amraoti	11-6-70	16-2-71	5·49	
		TOTAL, AMRAOTI . .	...	...	...	5·49
7	(*d*)	INDIAN MIDLAND SECTION. (*5′ 6″ gauge*).				
		Main line—				
		Bhopal to Jhansi	*	1-1-89	180·49	
		Jhansi to Gwalior	11-6-86	1-3-89	60·39	
		Gwalior to Hatampur.	24-8-77	20-12-79	32·40	
		Hatampur to Dholpur		15-5-81	8·55	
		Dholpur to Agra Cantonment	16-2-76	10-1-78	33·69	
		Total, Main line .	...	...	...	315·52
		Branches—				
		Manikpur branch—				
		Jhansi to Mau Ranipur	23-8-83	5-6-89	39·96	
		Mau Ranipur to Banda		1-8-89	78·96	
		Banda to Manikpur		15-2-89	61·45	
					180·37	
		Cawnpore branch—	Cawnpore to Kalpi, 12-3-84; Kalpi to Jhansi, 3-3-86.			
		Jhansi to Chaunrah		1-2-88	94·99	
		Chaunrah to Cawnpore		1-4-86	40·44	
					135·43	
		Bina to point of junction with Bina-Goona-Baran railway.	...	1-5-95	2·00	
		Bhopal to point of junction with Bhopal-Ujjain railway.	...	11-11-95	0·21	
		Bina-Saugor-Katni branch—				
		Bina to Saugor	Aug. '87	5-6-89	46·24	
		Saugor to Damoh	Dec. '95	26-3-98	47·83	
		Damoh to Katni	Jan. '86	1-1-99	67·88	
		From centre of Katni-Murwara station to junction with Bengal-Nagpur railway	...	1-1-90	0·71	
		Connecting link with East Indian railway at Katni-Murwara from points in Indian Midland railway main line to junction with East Indian railway .	...	1-1-99	0·34	
					163·00	
		Total Branches .	...	...	...	481·01
		TOTAL, OPEN MILEAGE, INDIAN MIDLAND PROPER .	...	...	...	796·53
		Carried over .	...	...	...	796·53 / 1,561·63

* Sanctioned in sections as follows: Bhopal to Bhilsa, 2nd March 1886; Bhilsa to Basoda, 24th June 1886; Basoda to Lalitpur, 24th December 1886; and Lalitpur to Jhansi, 21st September 1886.

	REMARKS.
5. Bina-Goona-Baran and Bhopal-Ujjain railways—*concld.*	
(*b*) General conditions—*concluded.*	
(iii) *Terms of working.*†—*Bina-Goona and Bhopal-Ujjain.*—The Company retain 50 per cent. of the gross receipts of the railway of each half-year; and receive rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively; and rent for the telegraph lines and instruments when not the property of the railway.	
Goona-Baran.—The Company retain out of the gross receipts a sum (which includes any single item of capital expenditure, not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile open in each half-year), bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year, but not exceeding 50 per cent. of the entire gross receipts of the railway for that half-year.	
(iv) *Rates and fares.*—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.	
6. Bhopal-Itarsi railway—	
(*a*) The Bhopal-Itarsi railway is worked under the following contract :—	
Contract of—30th June 1887 (between the Government of India and Her Highness the Begum of Bhopal) for construction.	
20th April 1894 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working.	
(*b*) The general conditions of the contracts are as follows :—	
(i) *Government aid.*—The British Government has paid for the portion, 13·11 miles, in their own territory, and a moiety of the cost of the bridge over the Nerbudda or in all, about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions.	
(ii) *Currency of contract.*—The provisions in the contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend and are applicable to the Bhopal-Itarsi railway.	
(iii) *Power of Company to surrender contract.*—Nil.	
(iv) *Terms of working.*—The Company receive a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.	
(v) *Rates and fares.*—The same rates and fares as are in force on the Great Indian Peninsula railway.	
7. Gwalior Light railway—	
(*a*) The Gwalior Light railway is worked under the following agreement :—	
Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.	
(*b*) The general conditions of the agreement are as follows :—	
(i) *Government aid.*—The Gwalior Light railway is the property of the Gwalior Durbar.	
(ii) *Currency of contract.*—Either party may determine the agreement by giving three months' notice.	
(iii) *Terms of working.*—The gross receipts are to be collected and treated as receipts of the Indian Midland Railway Company and from them will be deducted the actual expenditure in the Traffic and audit departments for station and train staff, audit clerks on printing and stationery and stores consumed and all other expenses connected therewith and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal *plus* 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance will be paid over to the Gwalior Durbar.	
(v) *Rates and fares.*—Rates and fares the same as are in force on the Great Indian Peninsula railway.	

† These terms are applicable only to those portions of the lines owned by the Gwalior State; the Bhopal, Tonk and Kotah Durbars having accepted the revised method of arriving at the working expenses, the percentage that the working expenses bear to the gross earnings of the Indian Midland railway system is applied in arriving at the expenditure for the Bhopal, Tonk and Kotah States and no additional charge is made for rent of wires, etc., payable to Government.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—*contd.*				
		Brought forward .	...	...	...	1,561·63 / 796·53
		Line under construction or sanctioned for construction.				
		Ait to Kunch	23-9-02	...	8·85	
		Total, line under construction .	...	...	...	8·85
		TOTAL, INDIAN MIDLAND PROPER .				805·38
7	(*e*)	BINA-GOONA-BARAN— (*5′ 6″ gauge*).				
		From the joint boundary of the Indian Midland and Bina-Goona-Baran railways, a point 2·00 miles from the centre of Bina station to Goona.	2-3-92	23-9-95	71·73	
		From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet.).	28-1-97	15-5-99	73·90	
		TOTAL, BINA-GOONA-BARAN .	...	...	...	145·63
7	(*f*)	BHOPAL-UJJAIN— (*5′ 6″ gauge*).				
		Bhopal to Ujjain	10-11-92	11-11-95	113·27	
		TOTAL, BHOPAL-UJJAIN .	...	...	...	113·27
7	(*g*)	BHOPAL-ITARSI— (*5′ 6″ gauge*).				
		Main line—				
		Itarsi to Hoshangabad	31-7-80	1-6-82	10·89	
		Hoshangabad to Bhopal		18-11-84	46·22	
		Total, Main line .	...	...	...	57·11
		Branch—				
		Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal.	July '94	11-11-95	0·28	
		Total Branch .	...	...	...	0·28
		TOTAL, BHOPAL-ITARSI .	...	...	...	57·39
		Carried over .	...	...	...	2,683·30

on the 31st December 1902, alphabetically arranged.

REMARKS.

8. General Remarks—

4·39 miles of the Great Indian Peninsula railway from Dadar Junction to Carnac bridge are worked over by the Bombay, Baroda and Central India railway.

The Great Indian Peninsula railway has running powers over 7·25 miles of the Bombay, Baroda and Central India railway from Dadar Junction to Colaba.

The Indian Midland railway has running powers over the following lengths of foreign lines:—2·89 miles at Agra belonging to the Rajputana-Malwa railway; 12·75 miles from Agra to Tundla; 1·48 miles at Cawnpore; 0·63 mile at Manickpur and 0·35 mile at Katni belonging to the East Indian railway; 1·59 miles at Katni, belonging to the Bengal-Nagpur railway; 0·24 mile at Ujjain, belonging to the Bombay, Baroda and Central India railway; 1·00 mile at Cawnpore belonging to the Oudh and Rohilkhand railway, and also 44·63 miles from Cawnpore to Lucknow.

9. Details of construction—

(*a*) *Permanent-way—*

Great Indian Peninsula railway.—The rails originally laid were iron, weighing 68 lb. and 84 lb. to the yard. These have now been replaced by steel rails; there were 64·81 miles of 86 lb; 1,078·95 miles of 82 lb. and 585·38 miles of 69 lb. on the 31st December 1902 on the main line only. The sleepers originally laid were chiefly wooden. These are now mostly replaced by iron pots; there were 1,677·50 miles of bowl sleepers and 51·64 miles of wooden sleepers on the 31st December 1902 on the main line only. The whole of the South East line, excepting the Ghat section, is laid with iron pots. On the Dhond-Manmad line, the rails are chiefly double headed steel, 69 lb. to the yard, laid on iron pot sleepers. On the Wardha Coal railway, there are 18·13 miles of 69 lb. double headed steel rails and 26·27 miles of 68 lb. iron rails. The sleepers are of mixed wood for 40·37 miles and cast iron pot sleepers, 5·02 miles.

Khamgaon railway.—The line was originally laid with 57lb. flat-footed rails on cast-iron pots, but in 1895 the whole of these were removed and replaced with second-hand Great Indian Peninsula railway 68 lb. iron rails and cast-iron pot sleepers. There is only 0·18 mile of road at Jalamb end which is laid with 82 lb. steel rails.

Amraoti railway.—With the exception of 0·50 mile at Badnera end which is laid with steel rails, the permanent-way is of iron, the rails weighing 68lb. to the yard; the sleepers are pot.

Indian Midland railway.—The main line, with the branches from Jhansi to Manickpur and Bina to Katni, is laid with 80lb. flat-footed steel rails on cast-iron oval pot sleepers. From Jhansi (Cawnpore branch) to mile 325·50, 80lb. flat-flooted steel rails and cast-iron oval pot sleepers are also used. Thence to mile 331 (0·75 mile beyond Jumna Bridge) the permanent-way consists of East Indian railway 75lb. double headed steel rails laid on wooden sleepers, and from there to Cawnpore on Denham and Olpherts' sleepers, a length of about 46 miles. The latter are now being gradually replaced by iron pots of the Great Indian Peninsula pattern, 0·85 mile having been done to 31st December 1902. The East Indian railway type rails and wooden sleepers between miles 325·50 and 331·00 are also being renewed with Indian Midland railway 80lb. flat-footed steel rails and cast-iron oval pots.

Bina-Goona-Baran railway.—On the Bina-Goona section, the permanent-way consists of 75 lb. steel rails laid on steel transverse sleepers. On the Goona-Baran section, the permanent-way consists of 75 lb. flat-footed steel rails with 4 holed fish-plates laid on deodar sleepers. Some 15 miles of Indian State railway pattern steel trough sleepers surplus from the Bhopal-Ujjain and Bina-Goona railways have been utilized on the Gwalior section.

Bhopal-Ujjain railway.—The permanent-way consists of 75lb. flat-footed steel rails laid on transverse steel sleepers.

Bhopal-Itarsi railway.—The line was originally laid with 62 lb. steel rails. Up to the end of December 1902, 49·08 miles of track have been relaid with Indian Midland railway 80 lb. steel rails. The sleepers were partly of steel and partly of creosoted pine and other kinds of wood. The wooden sleepers have been renewed from time to time with Indian Midland railway pot sleepers. A similar operation has now been taken in hand with the steel trough sleepers in the road, of which eleven miles have been renewed with Indian Midland railway pot.

Gwalior Light railway.—The permanent-way consists of 30lb. steel rails laid on sál and steel trough sleepers, Indian State railway pattern.

(*b*) *Ballast.*—The line is fully ballasted throughout.

(*c*) *Tunnels.*—The following are the tunnels of 500 feet length and over—Bhore Ghat No. 7 (near Palasdhari) 837 feet; No. 8 (near Palasdhari) 858 feet; No. 9 (near Thakurvadi) 825 feet; and No. 13 (between Palasdhari and Thakurvadi) 1,305 feet; No. 16, 594 feet; No. 22 (near Reversing station) 828 feet; and No. 23 (between Thakurvadi and Bhore Ghat Reversing) 768 feet; No. 24 (between Bhore Ghat Reversing and Khandala) 1,023 feet; Thull Ghat No. 2 (between Kasara and Thull Ghat Reversing) 1,625 feet; No. 4, (near Kasara) 713 feet; No. 7 (near Igatpuri) 1,461 feet; No. 8 (near Igatpuri) 1,247 feet; and No. 11 (between Thull Ghat Reversing and Igatpuri) 777 feet; and Bagra (between Gurra and Bagra) 910 feet. There are 27 other tunnels varying in length from 132 feet to 500 feet, aggregating 7,834 feet.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—*concld.*				
		Brought forward . .	...	...	...	2,683·30
7	(*h*)	GWALIOR LIGHT—				
		(*2′ 0″ gauge*).				
		Gwalior to Sipri	...	2-12-99	73·81	
		Gwalior to Bhind	...	2-12-99	52·33	
		Total open mileage .	...	...	...	126·14
		Line under construction or sanctioned for construction.				
		Gwalior to Subalgarh	2-10-01	...	57·86	
		Total line under construction .	...	...	...	57·86
		TOTAL, GWALIOR .	...	...	...	184·00
		GRAND TOTAL, GREAT INDIAN PENINSULA SYSTEM.	...	...	...	2,867·30
21	(*c*)	GUNTAKAL-MYSORE FRONTIER— (*See* Southern Mahratta system, page 396.)				
7	(*h*)	GWALIOR LIGHT— (*See* Great Indian Peninsula system, page 334.)				
5	(*b*)	HARDWAR-DEHRA— (*See* Oudh and Rohilkhand system, page 372.)				
21	(*d*)	HINDUPUR (YESVANTPUR-MYSORE FRONTIER). (*See* Southern Mahratta system, page 396.)				
21	(*j*)	HOSPET-KOTTUR— (*See* Southern Mahratta system, page 396.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.
9. Details of construction—*concld.*
(*d*) *Bridges.*—The important bridges of 1,000 feet length and over are as follows:—Bhima (between Diksal and Katraj) 28 spans of 40 feet; Cogni (between Shahabad and Wadi) 16 spans of 75 feet, 6 spans of 60 feet, and 12 spans of 30 feet; Kistna (between Krishna and Chicksugur) 36 spans of 100 feet (3,855·09 feet); Tapti (between Bhusaval and Daskheda) 5 spans of 138 feet, and 28 spans of 59 feet (2,556 feet); Mund (between Naghjhari and Paras) 15 spans of 60 feet; Towa (between Gurra and Bagra) 4 spans of 202 feet, and 2 spans of 132 feet; Nerbudda (between Bikrampur and Shahpura) 5 spans of 137 feet, and 6 arches of 40 feet (1,052 feet); Bhima (between Dhond junction and Pimpri) 28 spans of 40 feet; Godavari (between Puntamba and Samvatsar) 21 spans of 50 feet; Girna (between Jalgaon and Paldhi) 9 spans of 1,66·16 feet (1,572 feet); Girna (between Chalisgaon and Jamdah) 13 spans of 100 feet (1,417 feet); Ken (between Khairada and Banda) 12 spans of 100 feet, and 1 span of 250 feet (1,558 feet); Betwa (between Oorcha and Barwa Sagar) 13 spans of 150 feet, and 1 span of 60 feet (2,166 feet); Dhassan (between Rora and Harpalpur) 13 spans of 100 feet; Jumna (between Chaunrah and Kalpi) 10 spans of 250 feet (2,626 feet); Bearma (between Damoh and Ghatira) 11 spans of 100 feet; Betwa (between Talbahat and Basai) 9 spans of 150 feet (1,446 feet); Sindh (between Sanagir and Dabra) 9 spans of 100 feet, and 1 span of 60 feet; Chambal (between Hetampur and Dholpur) 12 spans of 186 feet, and 2 spans of 136 feet (2,714 feet); Betwa (between Bina and Mangavali), 16 spans of 100 feet; Parbati (between Dharnaoda and Bhulon) 11 spans of 100 feet; and Nerbudda (between Hoshangabad and Budni) 14 spans of 150 feet, and 1 span of 60 feet (2,306 feet).
(*e*) *Fencing.*—
Great Indian Peninsula railway.—The line, with the exception of the Mohpani, Chalisgaon-Dhulia and Jalgaon-Amalner branches is well fenced throughout.
Khamgaon railway.—About 1·26 miles of wire fencing have been provided at each end of the line, the remaining portion being unfenced.
Amraoti railway.—The line is fenced only at the Badnera and Amraoti ends.
Indian Midland railway.—The line is fenced throughout, except between Banda and Jhansi on the Jhansi-Manickpur section. On the Saugor-Katni branch, fencing has been erected through Saugor Cantonments and at Damoh and Katni-Murwara stations only.
Bina-Goona-Baran railway.—The line is fenced throughout from Bina to Goona, but the Goona-Baran section is unfenced except at stations.
Bhopal-Ujjain railway.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.
Bhopal-Itarsi railway.—The line is wholly fenced.
Gwalior Light railway.—The line is fenced between Gwalior and Morar only.
(*f*) *Curves.*—On the 5′ 6″ gauge section the sharpest curve has a radius of 990 feet; it is 0·34 mile long and is situated between mile 75 and 76 from Bombay.
Gwalior Light railway.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.
(*g*) *Gradients.*—Of a total open mileage on the system of 2,800·59 miles, 6·77 miles are on the ruling gradient of 1 in 80 on the 5′ 6″ gauge, (excluding Thal Ghat and Bhore Ghat which are on the ruling gradient of 1 in 37 aggregating 4·37 miles and 1·64 miles, respectively), and 1·17 miles of 1 in 40 on the 2′ 6″ gauge Gwalior Light railway.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
30	(*a*)	**HOWRAH-AMTA LIGHT—** (*2′ 0″ gauge.*)				
		Main line—				
		Telkul ghat (Howrah) to Dumjur	27-3-95	1-7-97	9·20	
		Dumjur to Bargachia		2-10-97	5·87	
		Bargachia to Maju		4-5-98	5·50	
		Maju to Amta		1-6-98	6·62	
		Total Main line	...	...	...	27·19
		Branch—				
		Bargachia to Jagatbalabpur	27-3-95	2-10-97	1·50	
		Total Branch	...	...	...	1·50
		TOTAL OPEN MILEAGE, HOWRAH-AMTA	...	...	...	28·69
		Lines under construction or sanctioned for construction—				
		Jagatbalabpur to Antpur	23-3-02	†7-4-04	8·50	
		Antpur to Champadanga				
		Antpur to Rajbulhat		...	12·50*	21·00
		TOTAL, HOWRAH-AMTA	...	...	...	49·69

* Commencement of work not yet authorised.
† Probable date of opening.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Howrah-Amta Light railway—**

(*a*) The Howrah-Amta Light railway is worked on the terms in Bengal Government, Public Works Department, Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1900 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

(*b*) The general conditions are as follows:—

(i) *Aid by the District Board.*—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 14 feet being left for vehicular traffic.

(ii) *Currency of agreement.*—The District Board has the power of determining the agreements after 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

(iii) *Terms of working.*—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, such surplus profits are divided between the Company and the District Board in equal proportions.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(v) *General remarks.*—After leaving Howrah, the line generally runs through the town of Howrah and along the district road to Amta. The extension to Champadanga will be constructed on a separate alignment of its own. Diversions have been made to avoid sharp curves in the road. On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the Howrah-Amta line.

2. **General remarks**—The Howrah-Sheakhala railway works over 2·00 miles of the Howrah-Amta railway from Howrah to Kadamtolla.

3. **Details of construction—**

(*a*) *Permanent-way.*—The permanent-way consists of steel rails, Vignole's pattern, 25 lb. to the yard, laid on cross-sleepers of pyinkado. On the extension the rails will be steel, Vignole's pattern, 30 lb. to the yard.

(*b*) *Ballast.*—The line is ballasted throughout.

(*c*) *Fencing.*—The line is unfenced.

(*d*) *Curves.*—The sharpest curve, sanctioned specially for the town of Howrah, is of 144 feet radius.

(*e*) *Gradients.*—Of a total mileage of 28·69 miles, 1·1 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
31	(*a*)	**HOWRAH-SHEAKHALA LIGHT—** (*2′ 0″ gauge.*)				
		Main line—				
		Kadamtolla to Chanditala	27-3-95	2-8-97	8·88	
		Chanditala to Kistrampur		10-9-97	3·75	
		Kistrampur to Sheakhala		7-11-97	4·75	
		Total Main line	...	...	...	17·38
		Branch—				
		Chanditala to Janai	27-3-95	5-5-98	2·37	
		Total Branch	...	...	...	2·37
		TOTAL, HOWRAH-SHEAKHALA	...	...	...	19·75
9	(*c*)	**HYDERABAD-GODAVARI VALLEY—** (*See* Nizam's Guaranteed State system, page 358.)				
7	(*d*)	**INDIAN MIDLAND—** (*See* Great Indian Peninsula system, page 330.)				
8	(*n*)	**JAIPUR (Siwai-Madhopur.)** (*See* Bombay, Baroda and Central India system, page 288.)				
6	(*d*)	**JAMMU AND KASHMIR (Native state section)—** (*See* North Western system, page 368.)				
20	(*b*)	**JAMNAGAR—** (*See* Bhavnagar-Gondal-Junagad-Porbandar system, page 274.)				
20	(*c*)	**JETALSAR-RAJKOT—** (*See* Bhavnagar-Gondal-Junagad-Porbandar system, page 274.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Howrah-Sheakhala Light railway— (*a*) The Howrah-Sheakhala Light railway is worked on the terms stated in Bengal Government, Public Works Department, Notification No. 112, dated the 26th March 1885, under the following agreements :— *Agreements of*—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company). 16th July 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company). (*b*) The general conditions are as follows :— (i) *Aid by the District Board.*—As subsidy for payment of interest, the District Board has guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. Land was also provided free of charge. (ii) *Currency of agreement.*—The agreement is current for a period of 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway from Howrah to Sheakhala with all its equipment as then constituted, a bonus of 15 per cent. over and above such value. (iii) *Terms of working.*—Whenever the net earnings of the Company are in excess of 4 per cent. upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board in the proportion of two-thirds to the Company and one-third to the District Board. (iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates. (v) *General remarks.*—On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. **2. General remarks.**—The Howrah-Sheakhala railway works over 2·00 miles of the Howrah-Amta railway from Howrah to Kadamtolla. **3. Details of construction—** (*a*) *Permanent-way.*—The permanent-way consists of steel rails, Vignole's pattern, 25lb. to the yard, laid on cross sleepers of pyinkado. (*b*) *Ballast.*—The line is ballasted throughout. (*c*) *Fencing.*—The line is unfenced. (*d*) *Curves.*—The sharpest curves, sanctioned specially for Howrah town, are of 144 feet radius. (*e*) *Gradients.*—Of a total mileage of 19·75 miles, 0·20 mile is on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		JODHPUR-BIKANER SYSTEM— *(3′ 3⅜″ gauge.)*			Miles.	Miles.
18	(*a*)	*Jodhpur section—*				
		Marwar Junction to Marwar Pali	1883	24-6-82	19·00	
		Marwar Pali to Luni Junction	1883	17-6-84	25·00	
		Luni Junction to Jodhpur	1884	9-3-85	20·00	
		Jodhpur to Merta Road	1890	8-4-91	64·00	
		Merta Road to Kuchaman Road	July 1891	13-3-99	73·00	
		Luni Junction to Pachpadra	31-12-85	22-3-87	60·00	
		Balotra to Barmer	Aug. 1897	15-5-95	60·00	
		Barmer to the Jodhpur Frontier	Aug. 1897	22-12-00	74·44	
		Merta Road to Nagour	1890	16-10-91	35·00	
		Nagour to Bhagu	1890	9-12-91	24·50	
		TOTAL, JODHPUR SECTION	...	...	...	454·94
18	(*b*)	*Bikaner section—*				
		Bhagu to Bikaner	1890	9-12-91	43·50	
		Bikaner to Dulmera	Dec. 1895	2-6-98	42·00	
		Dulmera to Lankaransar	27-1-98	1-1-01	8·32	
		Lankaransar to Suratgarh	9-2-99	1-1-01	63·53	
		Suratgarh to Bhatinda	15-7-99	9-9-02	88·00	
		TOTAL, BIKANER SECTION	...	...	...	245·35
		TOTAL OPEN MILEAGE, JODHPUR-BIKANER PROPER	...	...	...	700·29
18	(*c*)	JODHPUR-HYDERABAD (BRITISH SECTION)—				
		Hyderabad to Shadipalli	5-3-91	*18-8-92	55·49	
		Shadipalli to the Jodhpur Frontier	Aug. 1897	22-12-00	68·49	
		TOTAL, JODHPUR-HYDERABAD (BRITISH SECTION)	...	...	...	123·98
		GRAND TOTAL, JODHPUR-BIKANER SYSTEM	...	...	...	824·27
18	(*c*)	**JODHPUR-HYDERABAD—**				
		(*See* Jodhpur-Bikaner system, page 340.)				

* Date of opening of standard gauge line; converted and opened on the 3′ 3⅜″ gauge on the 20th October 1901.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Jodhpur-Bikaner railway system is made up of—

	Open line. Miles.
(*a*) Jodhpur section (3′ 3⅜″ gauge)	454·94
(*b*) Bikaner section (3′ 3⅜″ gauge)	245·35
(*c*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)	123·98
Total	824·27

2. **Jodhpur-Bikaner railway**—

(*a*) The Jodhpur-Bikaner railway is worked under the following contracts:—

Contracts of—13th July 1889 } (between the Government of India and the Jodhpur and Bikaner
30th July 1889 } Durbars) for constructing and working the line.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—The line is the exclusive property of the two Durbars.

(ii) *Currency of contract.*—These contracts may be modified at any time by mutual consent.

(iii) *Terms of working.*—Each Durbar to receive all the profits of its respective portions.

(iv) *Rates and fares.*—No provision was made for rates and fares in the contracts but certain rates and fares were approved by executive order.

3. **The Jodhpur-Hyderabad railway (British section)**—

(*a*) The Jodhpur-Hyderabad railway (British section) is worked under the following agreement—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3′ 3⅜″ gauge, from Balotra to Hyderabad, and for working the section from the Jodhpur Frontier to Hyderabad.

(*b*) The general conditions of the agreement are as follows:—

(i) *Currency of agreement.*—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice, on the 1st day of January or the 1st day of June in any year.

(ii) *Terms of working.*—Working expenses, excluding maintenance, are divided between the British and Native state sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

(iii) *Rates and fares.*—Maximum and minimum rates and fares and classification in force on the North Western railway from time to time to be in force on the British section.

Note.—Government of India, No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods, which is in force on the Native state section, being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

4. **Details of construction**—

(*a*) *Permanent-way*—

Jodhpur-Bikaner.—Between Kuchaman Road and Jodhpur and between Merta Road and Bhátinda, the permanent-way consists of 36 lb. flat-footed steel rails, laid on steel trough and deodar sleepers. From Jodhpur to Marwar Pali, the line was originally laid with old 36 lb. iron rails on jungle wood sleepers. The latter have all been replaced by deodar sleepers and a few short sections of steel trough sleepers, while the former are now replaced by 41½ lb. and 50 lb. steel rails. Beyond Marwar Pali, 36 lb. second-hand iron rails were originally laid on creosoted pine sleepers, which have for the most part been renewed by deodar, except for the last 3 miles, where a new approach has been lately constructed on steel trough sleepers while the old rails have been mostly replaced by others of 41½ lb. section. The line between Balotra and the Frontier is laid on 50 lb. steel rails and creosoted pine and steel sleepers. The permanent-way between Luni Junction and Balotra has been re-laid with similar rails and pine sleepers. The Balotra-Pachpadra section is laid with 36 lb. steel rails and steel trough sleepers; these are being gradually replaced by deodar sleepers on account of the salt soil.

Jodhpur-Hyderabad (*British section*).—The Hyderabad-Shadipalli section is laid with 60 lb. iron rails and deodar sleepers, and of the Shadipalli-Jodhpur Frontier section, about 14 miles at the Shadipalli end are laid with 41½ lb. rails and Denham-Olpherts cast iron sleepers, and the remainder with 50 lb. steel rails and deodar sleepers.

(*b*) *Ballast.*—

Jodhpur-Bikaner.—On the greater portion of the line the ballast consists of coarse sand and small kunkur; but on the Merta Road-Kuchaman Road and the Balotra Frontier sections it is chiefly broken stone, and on the Suratgarh-Bhatinda section, broken brick and kunkur.

Jodhpur-Hyderabad (*British section*).—The ballast is of kunkur stone and broken brick.

(*c*) *Fencing.*—With the exception of a few stations, the line is practically unfenced.

(*d*) *Curves.*—There are no curves under a radius of 1,000 feet.

(*e*) *Gradients.*—Of a total open mileage of 824·27 miles on the system, 2·31 miles are on the ruling gradient of 1 in 150.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
32	(*a*)	**JORHAT STATE LIGHT—** (*2' 0" gauge.*)				
		Main line—				
		Gosaigaon to Jorhat	13-9-83	15-12-84	9·00	
		Jorhat to Dhali river	13-9-83	15-12-84	9·50	
		Dhali river to Titabar	13-9-83	16-7-87	1·75	
		Extension line from Gosaigaon to Borghop (cold weather).	...	22-10-01	2·75	
		Total Main line	...	...	...	23·00
		Mariani branch—				
		Chenimara Junction to Mariani	13-9-83	7-1-85	7·00	
		Total Branch	...	...	...	7·00
		TOTAL, JORHAT	...	...	...	30·00
4	(*d*)	**JUBBULPORE-GONDIA EXTENSION—** (*See* Bengal-Nagpur system, page 272.)				
34	(*a*)	**KALKA-SIMLA—** (*2' 6" gauge.*)				
		Kalka to Simla	29-6-98	Oct. 1903*	60·00	
		TOTAL, KALKA-SIMLA	...	...	...	60·00

* Probable date of opening.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Jorhat State Light railway— (*a*) The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat and is owned and worked by the State. **2. Details of construction—** (*a*) *Permanent-way.*—Excepting 2·51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails, 30 lb. to the yard, the whole line including the section from Gosaigaon to Borghop is laid with steel rails, 18 lb. to the yard. (*b*) *Ballast.*—The line is unballasted. (*c*) *Fencing.*—The railway land acquired for stations and buildings at Jorhat only is demarcated by barbed wire fencing. (*d*) *Curves.*—The sharpest curve has a radius of 480 feet and is 468 feet in length. (*e*) *Gradients.*—Of a total mileage of 30·00 miles, 0·19 mile is on the ruling gradient of 1 in 100.
1. Kalka-Simla railway— (*a*) The Kalka-Simla railway is under construction and will be worked under the following contracts:— *Contracts of*—29th June 1898.—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working. 15th November 1901—Contract supplemental to that of 1898. (*b*) The conditions of the contracts are as follows:— (i) *Government aid.*—Land to be provided free of charge. (ii) *Terms of contract.*—The line is being constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000. (iii) *Currency of contract.*—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine, on giving notice, if the Company fail to comply with the obligations of the contract. In the former case, Government will pay a sum equal to twenty-five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent., or not being less than the total capital in sterling expended. In the latter case, Government will pay the fair value of the railway and works. (iv) *Power of Company to surrender contract.*—Nil. (v) *Terms of working.*—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), and the balance will represent net dividends for shareholders. (vi) *Rates and fares.*—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charge for tunnels and rack system portions, the Company can vary such rates within the maxima and minima. **2. Details of construction.—** (*a*) *Permanent-way.*—The permanent-way will be 41 lb. steel flat-bottomed rails on wooden sleepers. (*b*) *Tunnels.*—The following are the important tunnels on this line:—Gamma, 510 feet, at mile 5·62; Koti, 2,225 feet in length, mile 10; Kammarhatti I, 552 feet, mile 25; Barogh, 3,752 feet, mile 26½; Solon IV, 1,000 feet, mile 30¼; Brewery I, 810 feet, mile 31·75; Muttia II, 760 feet, mile 34·62; Ranoo I, 530 feet, mile 42; Kandaghat I, 1,225 feet, mile 35½; Taradevi I, 1,665 feet, mile 53; and Simla, 1,140 feet, at mile 59¾. There are 67 other tunnels, varying from 15 feet to 420 feet in length, aggregating 10,605 feet.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
22	(*d*)	**KARAIKKAL-PERALAM—** (*See* South Indian system, page 388.)				
7	(*b*)	**KHAMGAON—** (*See* Great Indian Peninsula system, page 330.)				
6	(*f*)	**KHUSALGARH-KOHAT-THAL—** (*See* North Western system, page 368.)				
10	(*c*)	**KOLAR GOLD-FIELDS—** (*See* Madras system, page 348.)				
21	(*f*)	**KOLHAPUR—** (*See* Southern Mahratta system, page 396.)				
13	(*b*)	**LEDO AND TIKAK-MARGHERITA COLLIERY—** (*See* Dibru-Sadiya system, page 304.)				
17	(*b*)	**LUCKNOW-BAREILLY—** (*See* Rohilkund and Kumaon system, page 378.)				
6	(*e*)	**LUDHIANA-DHURI-JAKHAL—** (*See* North Western system, page 368.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
10	(*a*)	**MADRAS SYSTEM—**				
		(*5′ 6″ gauge.*)				
		SOUTH-WEST LINE—				
		Main line—				
		Madras to Veyasarpaudy	April 1868	7-4-73	2·16	
		Veyasarpaudy to Arcot	Veyasarpaudy	1-7-56	63·22	
		Arcot to Katpadi	to Arkonam,	7-5-57	14·96	
		Katpadi to Gudiyattam	between	19-5-58	15·36	
		Gudiyattam to Ambur	July 1853	16-1-60	17·01	
		Ambur to Vaniyambadi	and Febru-	1-2-60	9·98	
		Vaniyambadi to Tirupattur	ary 1854;	23-5-60	14·19	
		Tirupattur to Salem	Arkonam to	1-2-61	69·98	
		Salem to Sankaridrug	Kadalundi,	1-12-61	23·68	
		Sankaridrug to Podanur	between	12-5-62	71·18	
		Podanur to Pattambi	February	14-4-62	64·96	
		Pattambi to Kuttippurum	1854 and	23-9-61	11·59	
		Kuttippurum to Tirur	May 1857.	1-5-61	9·39	
		Tirur to Kadalundi		12-3-61	16·31	
		Kadalundi to Calicut	August '84	2-1-88	9·26	
		Calicut to Badagara	6-5-97	1-10-01	28·95	
		Badagara to Tellicherry		1-5-02	14·73	
		Total Main line	...	...		456·82
		Branches—				
		Rayapuram branch—				
		Veyasarpaudy to Rayapuram	9-6-53	1-7-56	2·16	
		Rayapuram to Beach	16-12-99	22-1-00	1·03	
		Walajah Road (Arcot) to Ranipet	9-12-97	17-4-99	4·17	
					7·36	
		Bangalore branch—				
		Jalarpet Junction to Bangalore Cantonment	1862	1-8-64	84·37	
		Bangalore Cantonment to Bangalore City	March 1881	1-7-82	3·05	
					87·42	
		Nilgiri branch—				
		Podanur Junction to Coimbatore	17-8-70	1-2-73	3·78	
		Coimbatore to Mettupalaiyam		31-8-73	21·97	
					25·75	
		Palghat branch—				
		Olavakkot to Palghat	4-1-87	2-1-88	2·47	
		Total Branches	...	...	...	123·00
		TOTAL, SOUTH-WEST LINE	...	...	...	579·82
		NORTH-WEST LINE—				
		Main line—				
		Arkonam to Nagari	23-6-59	4-3-61	17·27	
		Nagari to Puttur	23-6-59	8-12-61	9·59	
		Puttur to Renigunta	& 3-1-69	15-9-62	14·46	
		Renigunta to Reddipalle	31-1-61 & 26-5-63	1-10-64	38·02	
		Reddipalle to Cuddapah	26-5-63 & 18-11-63	1-9-65	39·59	
		Cuddapah to Muddanuru	18-11-63, 20-7-63 & 22-7-65	1-8-66	34·31	
		Muddanuru to Tadpatri	8-5-65 & 22-7-63	1-9-68	32·07	
		Tadpatri to Gooty	8-5-65 24-5-65 & 25-5-66	1-8-69	29·72	
		Gooty to the Tungabhadra river	22-6-66 & 23-8-69	12-12-70	75·33	
		Tungabhadra to Raichur	22-9-69	15-3-71	17·92	
		TOTAL, NORTH-WEST LINE	...	...	...	308·28
		TOTAL, OPEN MILEAGE, MADRAS PROPER	...	...	...	888·10
		Carried over	...	...	...	888·10

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Madras railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Madras railway (5′ 6″ gauge)	888·10	17·07	905·17
(*b*) East Coast State railway (North-East line) (5′ 6″ gauge)	497·19	0·93	498·12
(*c*) Kolar Gold-fields railway (5′ 6″ gauge)	9·88	...	9·88
(*d*) Nilgiri railway (3′ 3⅜″ gauge)	16·90	...	16·90
(*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)	64·75	...	64·75
(*f*) *Azhikal-Mangalore Extension* (5′ 6″ *gauge*)	...	77·27	77·27
(*g*) *Morappur-Dharmapuri* (2′ 6″ *gauge*)	...	18·37	18·37
(*h*) *Tirupattur-Krishnagiri* (2′ 6″ *gauge*)	...	26·46	26·46
Total	1,476·82	140·10	1,616·92

2. **Madras railway.**—

(*a*) The Madras railway is worked under the following contracts :—

Contracts of—22nd December 1852 (South-West line).
19th December 1855 (South-West line).
13th August 1858 (North-West line).
2nd January 1871 (Amalgamation).
18th January 1901 (Calicut-Azhikal extension).
1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

(ii) *Currency of contracts.*—In ninety-nine years from 1st April 1857, the line reverts to Government who would then pay only for the rolling-stock at its fair value, provided the Company had not previously given notice terminating the contract. Government may determine the contract by purchase within six months after the expiration of 25 or 50 years of the term, at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fail to observe their obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

(iii) *Power of Company to surrender contract.*—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.

(iv) *Terms of working.*—As to the lines covered by the contract of 2nd January 1871. After deducting the working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) the surplus profits after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1*s.* 10*d.* per rupee are divided equally between Government and the Company. As to the Calicut-Azhikal railway, working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901, the covenants and provisions of the several principal Indentures apply to the Calicut-Azhikal railway.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
10	(*a*)	**MADRAS SYSTEM**—*contd.*				
		Brought forward .	...	...	...	888·10
		DOUBLE LINE, SOUTH-WEST LINE—				
		Washermenpet to Veyasarpaudy	21-3-01	14-9-01	1·02	
	c	Madras to Veyasarpaudy Junction . . .	Probably 71—72	7-4-73	2·16	
		Veyasarpaudy Junction to Perambur . . .		7-2-74	1·30	
		Perambur to Avadi	Probably 75—76	1-5-77	9·54	
		Avadi to Tiruvallur		20-7-77	12·89	
		Tiruvallur to Arkonam		28-8-77	16·52	
		TOTAL DOUBLE LINE, SOUTH-WEST LINE .	...	...	43·43	
10	(*b*)	NORTH-EAST LINE (EAST COAST STATE RAILWAY)—				
		Main line—				
		Washermenpet to Ennur	August '94	22-2-96	8·25	
		Ennur to Gudur	July '95	29-2-99	75·25	
		Gudur to Nellore		*1-11-88	23·75	
		Nellore to Kistna Canal Junction . . .		20-12-98	155·00	
		Kistna Canal Junction to Bezwada . . .	July '90	15-7-97	3·06	
		Bezwada to Kovvur		20-2-93	88·24	
		Kovvur to Rajahmundry		6-8-00	4·69	
		Rajahmundry to the Junction point near Waltair		15-7-93	119·80	
		Junction point near Waltair station to Waltair .		15-7-93	4·25	
		Tadepalli to Bezwada		1-1-94	2·97	
		Total Main line .	...	...	...	485·26
		Branches—				
		Samalkot Junction to Cocanada port branch .	July '90	15-7-93	9·75	
		Waltair to end of branch near Vizagapatam station		15-7-93	2·18	
		Total Branch .	...	...	...	11·93
		Double line—				
		Bengal-Nagpur railway North distant signal to North facing points at Waltair . . .	...	...	0·46	
		TOTAL, NORTH-EAST LINE (EAST COAST STATE RAILWAY).	...	...	...	497·19
10	(*c*)	KOLAR GOLD-FIELDS— (*5′ 6″ gauge.*)				
		Bowringpet to Matikuppam	July '92	1-6-94	9·88	
		TOTAL, KOLAR GOLD-FIELDS . .	...	...	...	9·88
10	(*d*)	SHORANUR-COCHIN— (*3′ 3⅜″ gauge.*)				
		Shoranur to Ernakulam	28-4-99	16-7-02	64·75	
		TOTAL, SHORANUR-COCHIN .	...	...	...	64·75
10	(*e*)	NILGIRI— (*3′ 3⅜″ gauge.*)				
		Mettupalaiyam to Coonoor	Probably in 1892	15-6-99	16·90	
		TOTAL, NILGIRI . .	...	...	...	16·90
		Carried over . .	...	...	...	1,476·82

* Date of opening of original 3′ 3⅜″ gauge; converted to and opened on the standard gauge on 1st November 1899.

REMARKS.

2. Madras railway—*concluded.*

(v) *Rates and fares.—Madras railway system (except North-East line).*—Under the contract, Government fixed a maxima which cannot be altered by Government, and which cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company by an executive order to vary these rates within the prescribed maxima without reference to Government.

(vi) *General remarks.*—The Madras railway runs from Madras to Arkonam, where it divides into two branches, one proceeding in a north-westerly direction to Raichur, the other in a south-westerly direction to Calicut. The latter has branches to Bangalore, Mettupalaiyam and Palghat.

The main line originally commenced at Rayapuram, but on the opening of the length between Veyasarpaudy Junction and the Central station this became a portion of the main line, and the old line from the junction to Rayapuram was then treated as a branch. The line from Bangalore Cantonment to Bangalore City was constructed as a part of the Mysore State railway, but was subsequently made over to the Madras Railway Company. The portion from Gudur to Nellore, which was originally laid on the 3′ 3⅜″ gauge was converted to 5′ 6″ gauge on the opening of the East Coast State railway. The working of the East Coast State railway (North-East line) was taken over by the Madras Railway Company from the 1st January 1901.

3. North-East line (East Coast State)—

(*a*) The North-East line (Southern Section of the East Coast State railway) is worked under the following contract :—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working, with effect from the 1st January 1901.

(*b*) The general conditions of the agreement are as follows :—

(i) *Currency of contract.*—The contract is to continue in force till the 31st December 1907. If the original contract with the Company dated the 2nd January 1871 is terminated for any reason under the provisions thereof prior to the expiry of the term of this contract—the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April 1904 or on the 1st April of any subsequent year.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

(ii) *Terms of working.*—The working expenses of the State railway are to include per half-year any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following :—

(*a*) The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way", "Repairs of bridges, etc., wages and materials", "Conservancy of rivers", and "Repairs of staff quarters."

(*b*) The share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway.

(*c*) The allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras.

(*d*) The expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders.

The balance of the gross earnings to belong to Government.

(iii) *Rates and fares.*—Government exercise full control over rates and fares.

(iv) Government have reserved the power to require at six months' notice the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		Brought forward .	...	...	...	1,476·82
		MADRAS SYSTEM—*continued.*				
		Lines under construction or sanctioned for construction.				
10	(*a*)	MADRAS (SOUTH-WEST LINE)—				
		Tellicherry to Azhikal	6-5-97	*31-3-03	17·07	
10	(*b*)	NORTH-EAST LINE (EAST COAST STATE RAILWAY)—				
		Korukupet to Basin Road Junction . . .	...	...	0·93	
		FAMINE LINES (MADRAS PRESIDENCY)— (*2′ 6″ gauge.*)				
10	(*g*)	Morappur to Dharmapuri	24-10-02	...	18·37	
10	(*h*)	Tirupattur to Krishnagiri	24-10-02	...	26·46	
10	(*f*)	AZHIKAL-MANGALORE EXTENSION—				
		Azhikal to Mangalore	24-10-02	...	77·27	
		Total, Lines under construction .	...	...	...	140·10
		GRAND TOTAL, MADRAS SYSTEM . .	...	...	...	1,616·92

* Probable dates of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.
4. The Kolar Gold-fields railway—
(*a*) The Kolar Gold-fields railway is worked under the following agreement :—
Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance, with effect from 1st January 1901.
(*b*) The general conditions of the agreement are as follows :—
(i) *Government aid.*—The line is the property of the Mysore State.
(ii) *Currency of agreement.*—The agreement to remain in force, subject to six months' notice, from either side on the 30th of June or the 31st of December of any year.
(iii) *Terms of working.*—The Company to charge for working and maintenance the same proportion which the working expenses of the whole system including this line bear to the gross earnings of that system and 5 per cent. of the gross earnings of the railway for rolling-stock.
(v) *Rates and fares.*—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time upon the Madras railway.
(vi) *General remarks.*—The line was constructed by the Mysore State in order to provide facilities for the gold-fields.
5. The Nilgiri railway—
(*a*) The Nilgiri railway is worked under the following agreement :—
Agreement of—26th May 1898 (between the Madras Railway Company and the new Nilgiri Railway Company) for working.
NOTE.—This agreement has been revised provisionally for six months ending June 1903. as regards remuneration to Madras railway for working.
(*b*) The general conditions of the agreement are as follows :—
(i) *Government aid.*—Land was provided free.
(ii) *Terms of working.*—Nilgiri railway to pay actual outlay on Engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working, the Madras railway to receive 25 per cent. of gross earnings *plus* 10 per cent. of the net receipts.
(iii) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.
(iv) *General remarks.*—The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894; and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line was purchased by Government with effect from the 1st January 1903.
6. Shoranur-Cochin railway—
(*a*) The Shoranur-Cochin railway is worked under the following agreement :—
Agreement of—1st January 1901 (between His Highness the Rajah of Cochin and the Madras Railway Company) for construction and working.
(*b*) The general conditions of the agreement are as follows :—
(i) *Government aid.*—The line is the property of the Cochin State.
(ii) *Currency of agreement.*—This agreement is to remain in force until the termination of the present agreement dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.
(iii) *Power to determine agreement.*—Nil.
(iv) *Terms of working.*—The Company charge for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Darbar and the Madras Railway Company in the proportion of four-fifths to the Darbar and one-fifth to the Company.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
10	(*a*)	**MADRAS SYSTEM**—*concluded.*				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
6. Shoranur-Cochin railway—*concld.*
(v) *Rates and fares.*—The same as are generally applicable from time to time to the system of railways worked by the Company.
7. General remarks.—The following lengths are worked over by foreign lines:—0·89 mile of the North-East line, from the distant signal at Bezwada to Bezwada station, is worked over by the Nizam's Guaranteed State railway; 4·97 miles from Waltair to Vizagapatam (including Wharf and Swamp lines) by the Bengal-Nagpur railway; and 2·99 miles from Tadepalli to Bezwada by the Southern Mahratta railway.
8. Details of construction.—
(*a*) *Permanent way*—
Madras railway.—The iron rails, which vary in weight from 65 lb. to 84 lb. to the yard, are laid on iron pot-sleepers. The renewals of these up to 189th mile were carried out with double-headed steel rails, 20 feet and 30 feet long, weighing 75 lb. to the yard, but this type has been discontinued, and bull-headed steel rails, 30 feet long and weighing 75 lb., 76 lb. and 80 lb. to the yard, (the last being the present standard) have since been used.
The South-West line was originally laid with sleepers of indigenous woods, but an experiment was made of using stone blocks, 2′ × 2′ × 1′, as sleepers. As the experiment proved unsatisfactory, the blocks were all removed in 1857. Jungle wood sleepers were found to be very short-lived; and in 1861 it was decided to replace them by Greave's patent cast-iron bowl sleepers. Cast-iron bowl sleepers (each 112 lb.) of an improved and stronger design, with steel bull-headed rails, 80 lb. to the yard and 30 feet in length, and a heavier type of plate are now being introduced.
The permanent-way on the length between Calicut and Tellicherry consists of flat-footed 62 lb. steel rails with 4-holed deep fishplates laid on wooden sleepers. The length between Tellicherry and Azhikal is under construction with the same type of permanent-way.
North-East line (East Coast State railway).—The permanent-way consists of flat-footed 75 lb. steel rails laid on wooden and pea-pod sleepers.
Kolar Gold-fields railway.—The line was originally laid with Madras railway second-hand double-headed 75lb. iron rails on new cast iron pot sleepers, but in consequence of the excessive wear due to the heavy traffic passing over this branch, the alignment has been improved and iron rails have been replaced by 76 lb. steel rails.
Nilgiri railway.—The permanent-way consists of steel rails, 50 lb. to the yard, laid on rails on pyinkado sleepers.
Shoranur-Cochin railway.—The permanent-way consists of 41¼ lb. steel flat-footed rails on wooden sleepers.
(*b*) *Ballast*—
The system is ballasted with stone and sand, chiefly the former.
(*c*) *Tunnels—Nilgiri railway.*—There are nine tunnels on the line varying in length from 62 feet to 308 feet, aggregating 1,578 feet.
(*d*) *Bridges.*—The following are the important bridges of 1,000 feet length and over: Poiney (between Ponnai Road and Tiruvallum), 56 spans of 30 feet; Gudiyattam (between Gudiyattam and Valathoor), 33 spans of 30 feet; Cauvery (between Cauvery and Erode), 20 spans of 64 feet and 2 spans of 62 feet; Kadaluindi (between Parpanargadi and Kadaluindi), 20 spans of 64 feet; Cheyair (between Razampeta and Nandalur), 50 spans of 64 feet (3,500 feet); Pennur (between Penneru and Tadpatri), 13 spans of 131 feet (1,830 feet); Tungabhadra (between Tungabhadra and Matmari), 36 spans of 64 feet and 44 spans of 29 feet (4,060 feet) Chitravati (between Kondapuram and Regadipalli), 19 spans of 131 feet (2,670 feet); Papaghni (between Kamalapuram and Gangayapalli), 15 spans of 131 feet (2,100 feet); Ennur Creek (between Ennur and Minjur), 30 spans of 40 feet; Penner (between Nellore and Pudugupadu), 23 spans of 70 feet and 5 spans of 40 feet (1,990 feet); Kistna (between Tadepalli and Bezwada), 12 spans of 292 feet (3,736 feet); Godavari (between Kovvur and Godavari), 56 spans of 150 feet and 1 span of 40 feet (9,096 feet); and Rush Kulya (between Chatrapur and Ganjam) 10 spans of 150 feet (1,598 feet).
(*e*) *Fencing.—The Madras, Kolar Gold-fields, and Nilgiri railways* are fenced throughout; the North-East line—(East Coast State) and the Shoranur-Cochin railways are only fenced in the vicinity of towns, stations and level crossings.
(*f*) *Curves.—5′ 6″ gauge sections.*—There are no curves under a radius of 1,000 feet on this railway except on the Beach line extension where the minimum radius of curve is 700 feet.
Nilgiri railway.—The curves vary from 318 feet to 716 feet in radius.
Shoranur-Cochin railway.—The sharpest curve is 818·57 feet in radius.
(*g*) *Gradients.*—Of a total open mileage on the system of 1,476·82 miles, 0·80 mile is on a gradient of 1 in 60 on the 5′ 6″ gauge, and 6·92 miles on 1 in 12·5 on the 3′ 3⅜″ gauge, Nilgiri line.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
10	(*b*)	**MADRAS (NORTH-EAST LINE)—** (*See* Madras system, page 348.)				
37	(*a*)	**MADURA DISTRICT LIGHT—** (*2′ 6″ gauge.*)				
		Ammayanakkanur to Kotagudi	1-4-01	...	55·00	
		Periyakulam to Krishnamanaik's tope . . .	1-4-01	...	5·00	
		Theni to Kuruvanath	1-4-01	...	33·00	
		TOTAL, MADURA DISTRICT . .	...	...	...	93·00
4	(*e*)	**MOHARBHANJ—** (*See* Bengal-Nagpur system page 272.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
Madura District Light railways—Messrs. Wilson and Company of Madras, the Promoters, were originally granted a concession for the construction of these lines under the Indian Tramways Act; but as there is no provision under this Act for payment of interest out of capital during construction, they submitted an amended application for a scheme for Light railways to be constructed under the provisions of the Indian Railways Act. The Promoters were informed that, subject to their acceptance of certain conditions, they might proceed to raise the necessary capital for the line. They accepted the conditions in July 1902 and are now negotiating a contract with the Madura District Board

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
10	(*g*)	**MORAPUR-DHARMAPURI—** (*See* Madras system, page 350.)				
24	(*a*)	**MORVI LIGHT—** (*2′ 6″ gauge.*)				
		Main line—				
		Wadhwan to Dolia	14-12-83	11-3-86	24·00	
		Dolia to Vankaner		20-11-86	27·75	
		Vankaner to Morvi		24-3-87	16·75	
		Total Main line	...	...	...	68·50
		Rajkot branch—				
		Vankaner to Rajkot	10-5-88	1-1-90	25·25	
		Extension across the Aji river to Rajkot Junction with the Jetalsar-Rajkot railway	6-1-94	6-8-94	0·61	
		Total Branch	...	...	...	25·86
		TOTAL, MORVI	...	...	...	94·36
2	(*d*)	**MYMENSINGH-JAMALPUR-JAGANNATHGANJ-** (*See* Eastern Bengal system, page 314.)				
21	(*g*)	**MYSORE-NANJANGUD—** (*See* Southern Mahratta system, page 396.)				
21	(*b*)	**MYSORE SECTION (SOUTHERN MAHRATTA)—** (*See* Southern Mahratta system, page 394.)				
8	(*c*)	**NAGDA-UJJAIN—** (*See* Bombay, Baroda and Central India system, page 280.)				
10	(*e*)	**NILGIRI—** (*See* Madras system, page 348.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Morvi Light railway—
(i) The Morvi Light railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.
(ii) *General remarks.*—This line is laid on the existing bridged and metalled road for the first 24 miles as far as Dolia and then runs along the line of unbridged and unmetalled road to Vankaner and on to Morvi and Rajkot. The conversion of the line to 3′ 3⅜″ gauge is in progress.
2. Details of construction—
(*a*) *Permanent-way.*—The permanent-way originally consisted of steel rails, weighing 19 lb. to the yard, and pressed steel sleepers weighing 11 lb. These have since been extensively replaced in sections by 29 lb. and 41¼ lb. steel rails and creosoted pine sleepers. On the Rajkot branch, from mile 55 to a distance of 21 miles, renewals have been effected by laying 41¼ lb., 3′ 3⅜″ gauge rails on creosoted pine sleepers of that gauge, with a view to eventual conversion. The extension across the Aji river has been laid with 3′ 3⅜″ gauge rails, weighing 41¼ lb. to the yard, on creosoted pine sleepers.
(*b*) *Ballast.*—Moorum (decayed trap) and sand.
(*c*) *Fencing.*—Line is unfenced.
(*d*) *Curves.*—There are 3·24 miles of curves under a radius of 1,000 feet.
(*e*) *Gradients.*—Of a total open mileage of 94·36 miles, 0·60 mile is on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		NIZAM'S GUARANTEED STATE SYSTEM— *(5' 6" gauge.)*				
9	(*a*)	NIZAM'S GUARANTEED STATE—				
		Main line—				
		Wadi Junction to Secunderabad and to junction of new line.	25-3-71	9-10-74	115·45	
		Junction of new line to Warangal	Nov. '84	8-4-86	87·47	
		Warangal to Dornakal	May '86	1-1-88	51·91	
		Dornakal to Bona Kalu	Jany. '87	5-8-88	31·72	
		Bona Kalu to British frontier		10-2-89	23·54	
		Total Main line .	...	...	...	310·09
		Branches—				
		Hyderabad branch—				
		Husain Sagar to Hyderabad	25-3-71	9-10-74	3·54	
		Mineral branch—				
		Dornakal to Singareni Coal-fields	May '86	1-1-88	16·50	
		Total Branches .	...	...	...	20·04
		TOTAL, NIZAM'S GUARANTEED STATE PROPER .	...	...	...	330·13
9	(*b*)	BEZWADA EXTENSION— *(5' 6" gauge.)*				
		Hyderabad frontier to Bezwada	26-11-86	10-2-89	20·58	
		TOTAL, BEZWADA EXTENSION .	...	...	...	20·58
9	(*c*)	HYDERABAD-GODAVARI VALLEY— *(3' 3⅜" gauge.)*				
		Manmad to Jalna	12-1-97	21-10-99	109·36	
		Jalna to Sailu		7-12-99	44·74	
		Sailu to Purbhani		25-4-00	26·43	
		Purbhani to Nanded		9-10-00	36·29	
		Nanded to Sivungaon		23-8-00	16·68	
		Sivungaon to Basar		25-4-00	33·89	
		Basar to Secunderabad		25-4-00	118·21	
		Secunderabad to Hyderabad		16-5-01	5·82	
		TOTAL, HYDERABAD-GODAVARI VALLEY .		...	...	391·42
		GRAND TOTAL, NIZAM'S GUARANTEED STATE SYSTEM	...	...	...	742·13

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(*a*) Nizam's Guaranteed State railway (5′ 6″ gauge)	330·13
(*b*) Bezwada extension (5′ 6″ gauge)	20·58
(*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)	391·42
TOTAL	742·13

2. **Nizam's Guaranteed State railway.**—

(*a*) The Nizam's Guaranteed State railway is worked under the following contract :—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

(*b*) The general conditions of the contract are as follows :—

(i) *Terms of contract.*—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon) His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land also was provided free of charge.

(ii) *Currency of contract.*—The contract is current for a period of 99 years, and on expiry by effluxion of time, the land, buildings and fixed works, etc., revert to the Nizam's Government and all rolling-stock, stores, etc., at a fair valuation. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

(iii) *Terms of working.*—From gross earnings will be deducted working expenses, and during the guaranteed period, the net earnings applied in the first instance to repayment of the annuity, paid in the same half-year. Of the residue, one moiety will be utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance, one-half will be paid to the Nizam's Government, the remaining moiety being made over to the Company.

(iv) *Rates and fares.*—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares from time to time prevailing on the Great Indian Peninsula railway.

(v) *General remarks.*—Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884, it was worked by State agency, and from January 1885, by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast State railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast State railway. It was transferred back to the Company for working from the 1st January 1901.

3. **Bezwada extension railway.**—The revised terms for working this railway are under consideration.

P. T. O.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railways.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		NIZAM'S GUARANTEED STATE SYSTEM— *concld.*				
14	(*b*)	**NOAKHALI (BENGAL)—** (*See* Assam-Bengal system, page 252.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

4. **Hyderabad-Godavari Valley railway—**

(*a*) The Hyderabad-Godavari Valley railway is worked under the following agreement :—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's State Railways Company) for construction and working.

(*b*) The general conditions of the agreement are as follows :—

(i) *Terms of contract.*—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, Government paying thereon an annuity, and, in addition a sum of one per cent. per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway, and after the expiration of the guaranteed period the interest payable thereon a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is also provided for.

(ii) *Currency of contract.*—On expiry of contract by effluxion of time, the land, buildings and fixed works, etc., revert to the Nizam's Government and all rolling-stock, stores, etc., at a fair valuation. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—From gross earnings will be deducted working expenses and the net earnings applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period, to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government, the remaining moiety being dealt with as above.

(v) *Rates and fares.*—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State line.

5. **General remarks.**—The Nizam's Guaranteed State railway has running powers over 0·89 mile from the distant signal at Bezwada to Bezwada station of the Madras railway (North-East line).

6. **Details of construction.—**

(*a*) *Permanent-way—*

Nizam's Guaranteed State railway.—The first 47 miles from Wadi are laid with bull headed 75lb. steel rails on cast-iron pot sleepers ; and the following 9 miles with double-headed 68lb. steel rails on pot sleepers. The remainder of the line is laid with 66½lb. flat-footed steel rails on steel pea-pod sleepers with the exception of the mixed gauge line from Secunderabad to Hyderabad (5·82 miles) which has wooden sleepers under the same section of rail.

Bezwada extension.—Is laid with 66½lb. flat-footed steel rails on pea-pod sleepers.

Hyderabad-Godavari Valley.—The permanent-way consists of 50lb. steel flat-footed rails on steel and wooden sleepers.

(*b*) *Ballast.*—The line is ballasted throughout.

(*c*) *Bridges.*—The only important bridge of 1,000 feet in length and over is that on the Hyderabad-Godavari Valley, over the Godavari river, which consists of 21 spans of 60 feet.

(*d*) *Fencing.*—On the Nizam's Guaranteed State railway, the line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station yards are fenced. On the Bezwada extension and Hyderabad-Godavari Valley railway, the line is fenced only at stations.

(*e*) *Curves.*—There are no curves under a radius of 1,000 feet.

(*f*) *Gradients.*—Of a total open mileage of the system of 742·13 miles, 2·52 miles are on the ruling gradient of 1 in 100 on the 5′ 6″ gauge, and 5·41 miles on the ruling gradient of 1 in 133 on the 3′ 3⅜″ gauge.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class : No. Main.	Class : No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		NORTH WESTERN SYSTEM— *(5′ 6″ gauge.)*			Miles.	Miles.
6	(*a*)	COMMERCIAL SECTION—				
		Main line—				
		Ghaziabad to Meerut City	1864	18-4-67	27·33	
		Meerut City to Umballa Cantonment		1-1-69	121·02	
		Umballa Cantonment to Ludhiana		12-10-69	70·66	
		Ludhiana to Phillour		15-10-70	8·28	
		Phillour to Jullundur Cantonment		1-4-70	24·12	
		Jullundur Cantonment to Beas		15-11-69	25·53	
		Beas to Amritsar		1-11-67	26·20	
		Amritsar to Lahore	8-2-59	10-4-62	32·30	
		Lahore to Jhelum	22-10-69	6-10-78	103·12	
		Jhelum to Rawalpindi	17-9-77	...	76·38	
		Rawalpindi to Haji Shah	3-10-79	1-1-81	61·62	
		Haji Shah to Attock bridge		1-5-81		
		Attock bridge to Khairabad		31-5-83	2·38	
		Khairabad to Peshawar City		1-5-82	41·25	
		Peshawar City to Peshawar Cantonment		1-1-83	2·65	
		Lahore to Mooltan Cantonment	8-2-59	24-4-65	207·82	
		Mooltan Cantonment to Muzaffarabad	8-11-71	21-8-70	6·89	
		Muzaffarabad to Khanpur		1-7-78	139·14	
		Khanpur to Rohri		1-7-78	132·05	
		Rohri to Sukkur	...	27-3-89	2·64	
		Sukkur to Radhan	4-11-72	1-10-78	79·31	
		Radhan to Laki		27-10-78	70·57	
		Laki to Kotri		8-10-78	75·48	
		Kotri to Kurrachee City	29-4-58	13-5-61	104·89	
		Kurrachee City to Kiamari (including Napier Mole line).	...	16-6-89	3·06	
		Total Main line				1,444·69
		Branches—				
		Sialkot branch—				
		Wazirabad to Sialkot	10-4-83	1-1-84	26·50	
		Wazirabad-Lyallpur branch—				
		Wazirabad to Hafizabad	...	15-8-95	37·37	
		Hafizabad to Sangla Hill	...	1-1-96	31·45	
		Sangla Hill to Lyallpur	...	15-2-96	27·21	
		Lyallpur to Toba Tek Singh	...	22-6-99	49·00	
		Toba Tek Singh to Khanewal	...	16-4-00	55·53	
					200·56	
		Kashmir branch—				
		Sialkot to the frontier of the Kashmir State	...	15-3-90	9·08	
		Phulji to Puranadera	...	1-6-82	2·57	
		Phulji branch extension	...	31-3-02	0·34	
					2·91	
		Sukkur to Sukkur Bandar	...	1-10-78	1·25	
		Kotri to Kotri Bandar	...	1-4-89	1·14	
		*Meean Meer chord branch *—*				
		Meean Meer East to Meean Meer West	...	10-12-91	2·13	
		Kotri-Rohri (chord) branch—				
		Kotri to Hyderabad	...	25-5-00	4·99	
		Hyderabad to Rahoki	...	28-3-01	6·04	
		Rahoki to Shahdadpur	...	15-11-96	39·09	
		Shahdadpur to Rohri	...	15-11-96	139·84	
					189·96	
		Carried over	...	...	433·53	1,444·69

* This is a military line and is not intended to be used for ordinary public traffic.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The North Western railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) North Western railway (5′ 6″ gauge)	3,077·50	82·50	3,160·00
(*b*) Southern Punjab railway (5′ 6″ gauge)	424·72	...	424·72
(*c*) Rajpura-Bhatinda railway (5′ 6″ gauge)	107·05	...	107·05
(*d*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)	78·66	...	78·66
(*e*) Jammu and Kashmir (Native state section), (5′ 6″ gauge)	15·92	...	15·92
(*f*) Dandot Light railway (2′ 6″ gauge)	6·18	...	6·18
(*g*) Nowshera-Durgai railway (2′ 6″ gauge)	40·25	...	40·25
(*h*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)	29·70	62·03	91·73
(*i*) *Jech-Doab (5′ 6″ gauge)*	...	51·40	51·40
Total	3,779·98	195·93	3,975·91

2. **North Western railway—**

(*a*) The North Western railway is owned and worked by the State.

(i) *General remarks—*

The first period of the contract with the Sind, Punjab and Delhi Railway Company having expired, the State assumed charge of the undertaking on the 1st January 1886 and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the southern section of the Sind-Pishin State railways to be worked as one Imperial system under the name of the North Western State railway. The completion and opening, on the 24th May 1883, of the Attock bridge supplied the last link in a continuous chain of railway communication from Calcutta to Peshawar, a distance of 1,555 miles.

The Wazirabad-Lyallpur branch was constructed to open up the country now being irrigated by the Chenab canal, and recently brought under cultivation by the colonists and settlers, who are reclaiming the desert land of the Rechna Doab.

The Kotri-Rohri chord was constructed owing to the set of the Indus on the right bank which rendered the line along that bank dangerous, and, owing to the frequent breaches, caused communication with Kurrachee to be intermittent, dislocating the export trade and cutting off communication with the North-Western Frontier. The present line, which follows the left bank of the river, is on high ground and is less liable to inundation. It saves about 36·51 miles on the through distance from the Punjab to Kurrachee, and also gives an alternative route to Quetta.

The line from the Bolan Junction station and from the Sibi station follows the old Quetta loop to Nari bank station, 4·81 miles from Sibi and 456·78 miles from Kurrachee. The old Bolan railway (Quetta loop) from Nari bank *viâ* Kundalani to Hirok has been dismantled, except the first portion from Nari bank to Rindli. The new line is on a completely new alignment between Nari bank and Kolpur, the actual length of the construction works being 57 miles from Nari bank to the mouth of the Mushkaf gorge (462 miles from Kurrachee.)

The Dandot Light railway has been constructed by the North Western State railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked by steel wire ropes by combined gravity and steam power. On the second portion (1·29 miles), there is another incline worked by gravity alone.

3. **Southern Punjab (Delhi-Samasata) railway.—**

(*a*) The Southern Punjab railway is worked under the following contracts:—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government allow the Company, in respect of each half-year, by way of rebate on the net earnings of the North Western railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western railway) as, together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual rupee expenditure charged in the capital account. Land was also provided free of cost to the Company.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		NORTH WESTERN SYSTEM—*contd.* (*5′ 6″ gauge.*)			Miles.	Miles.
		Brought forward	...	...	433·53	1,444·69
6	(*a*)	COMMERCIAL SECTION—*concld.*				
		Branches—concld.				
		Ferozepore branch—				
		Raewind to Kasur	9-11-82	15-4-83	16·50	
		Kasur to Ganda Singhwala	9-11-82	10-6-83	7·00	
		Ganda Singhwala to Ganda Singh Bandar	2-10-83	15-12-83	5·50	
		Ganda Singh Bandar to Hussainiwala	...	8-5-87		
		Hussainiwala to Ferozepore City	...	1-10-92	2·00	
		Ferozepore City to Ferozepore Cantonment	29-10-81	1-10-88	2·00	
		Ferozepore Cantonment to Bhatinda	...	15-6-99	*54·36	
		Hussainiwala to Ferozepore Cantonment	...	8-5-87	†3·50	
					90·86	
		Pathankot branch—				
		Amritsar to Dinanagar	6-12-81	1-1-84	51·22	
		Dinanagar to Pathankot	6-12-81	8-6-84	15·48	
					66·70	
		Peshawar-Jamrud branch—				
		Peshawar to Jamrud	...	1-1-01	11·04	
		Total Branches	...	...	...	602·13
		TOTAL OPEN MILEAGE (COMMERCIAL SECTION)	...	...	...	2,046·82
		FRONTIER SECTION (MILITARY)—				
		Main line—				
		Sind-Sagar—				
		Lala Musa to Baha-ud-din	24-7-77	‡1-1-80	28·46	
		Baha-ud-din to Hariah	24-7-77	‡1-2-80	10·52	
		Hariah to Malakwal	24-7-77	‡10-4-80	5·99	
		Malakwal to Bhakkar	...	15-8-87	175·04	
		Bhakkar to Chenab west bank	...	22-1-87	119·71	
		Chenab west bank to Chenab east bank	...	1-2-90	2·49	
		Chenab east bank to Sher Shah	...	1-1-89	2·39	
		Total Main line	...	...	...	344·60
		Branches—				
		Khushalgarh branch—				
		Golra Junction to Langar	Sep. '79	1-4-81	60·50	
		Langar to Khushalgarh	Sep. '79	16-4-81	9·66	
		Khushalgarh, new station	Sep. '79	18-7-83		
					70·16	
		Bhera branch—				
		Malakwal to Miani	24-7-77	‡10-4-80	8·99	
		Miani to Bhera	25-10-81	‡2-2-82	9·11	
					18·10	
		Bhaganwalah branch—				
		Haranpur to Bhaganwala	...	...	10·84	
		Khewra branch—				
		Chalisa Junction to Khewra salt mines	...	‡1-1-83	6·36	
		Khewra to Dandot	...	‡1-1-83	2·15	
					8·51	
		Mari branch—				
		Kundian to Mari	Kundian to Mianwali, 27-2-86	15-3-92	36·32	
		Dera Ghazi Khan branch—				
		Mahmud Kot to Ghazi ghat	...	1-4-87	11·27	
		Mari-Attock branch—				
		Cambellpore Cantonment (new station) to Basal Junction	...	1-4-99	18·45	
		Jand Junction to Daud Khel	...	1-4-99	53·91	
					72·36	
		Total Branches	...	...	...	227·56
		TOTAL OPEN MILEAGE, SIND-SAGAR	...	...	...	572·16
		Carried over	...	...	...	572·16 / 2,046·82

* Includes 26·28 miles of mixed gauge between Kotkapura and Bhatinda.
† This is a military line and is not intended to be used for ordinary public traffic.

	REMARKS.
3. Southern Punjab (Delhi-Samasata) railway—*concld.*	
(*b*) General conditions—concld.	
(ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1919, or on the 31st December 1929 or 1939, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent., the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.	
(iii) *Power of Company to surrender contract.*—Nil.	
(iv) *Terms of working.*—Government undertake to work and maintain the line and provide rolling-stock, at 52 per cent. of the gross earnings. Surplus profits in excess of 3½ per cent. per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western railway take all receipts from Delhi and Samasata traffic with North Western railway stations, and the Company also receives nothing on any other traffic passed over the Southern Punjab railway from or to North Western railway stations, nor from traffic between foreign lines and the North Western railway, provided that there is any other shorter route.	
(v) *Rates and fares.*—Rates and fares to be fixed by Government within the maximum and minimum rates and fares in force on the North Western State railway.	
(vi) *General remarks.*—The Southern Punjab railway runs from Delhi *viâ* Bhatinda to Samasata on the North Western State railway, shortening the distance by railway between Delhi and Kurrachee by 187 miles, as compared with the route *viâ* Umballa and Lahore.	
4. Rajpura-Bhatinda railway—	
(*a*) The Rajpura-Bhatinda railway is owned by the Patiala State and is worked by the North Western railway under the following contract—	
Contract of—30th January 1893 (between the Secretary of State and the Patiala Darbar) for maintenance and working.	
(*b*) The general conditions of the contract are as follows:—	
(i) *Government aid.*—The line has been constructed at the cost of the Patiala Darbar.	
(ii) *Currency of contract.*—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western State railway will give to the Patiala Darbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Darbar will indemnify the North Western State railway of all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.	
(iii) *Terms of working.*—After deduction of 55 per cent. of the gross receipts of the Rajpura-Bhatinda railway for working expenses, the balance to be paid over to the Patiala Darbar.	
(iv) *Rates and fares.*—Rates and fares as in force on the North Western State railway.	
5. Ludhiana-Dhuri-Jakhal railway—	
(*a*) The Ludhiana-Dhuri-Jakhal railway is worked under the following contract:—	
Contract of—6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Darbars) for construction and working.	
(*b*) The general conditions of the contract are as follows:—	
(i) *Government aid.*—The line was constructed at the cost of the Maler Kotla and Jind Darbars.	
(ii) *Currency of contract.*—The contract is terminable on the 31st December 1904, or on the 1st January or 1st July in any year thereafter, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western State railway will give to the Maler Kotla and Jind Darbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Darbars will indemnify the North Western State railway of all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.	
(iii) *Terms of working.*—After deduction of 55 per cent. of the gross receipts for working expenses, the balance to be paid to the Maler Kotla and Jind Darbars to be divided between them in the proportion of ⅛th and ⅞ths, respectively.	
(iv) *Rates and fares.*—Rates and fares as in force on the North Western State railway.	

‡ Dates of opening original 3′ 3⅜″ gauge line, subsequently converted to and opened on the 5′ 6″ gauge line as follows: Lala Musa to Malakwal, 10-2-86; Malakwal to Bhera 15-3-87; Chalisa Junction to Khewra salt mines 15-8-87; Khewra to Dandot, 1-8-89.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		NORTH WESTERN SYSTEM—*contd.* (*5′ 6″ gauge.*)				
		Brought forward	...	...	...	2,046·82
						572·16
6	(*a*)	FRONTIER SECTION (MILITARY)—*concld.*				
		Sind-Pishin—				
		Rukh to Sibi	Oct. '79	2-5-80	132·26	
		Sibi to Sharigh	...	20-3-87	74·80	
		Sharigh to Bostan	...	28-8-87	61·13	
		Base of Bostan triangle loop	...	...	0·31	
		Bostan to Killa Abdulla	...	25-1-88	38·14	
		Killa Abdulla to Chaman	...	1-1-92	29·40	
		TOTAL, SIND-PISHIN	...	...	...	336·04
		Mushkaf-Bolan—				
		Sibi (Point No. 51) to Quetta south distant signal	...	15-4-97	86·74	
		Quetta loop—				
		Quetta south distant signal to Bostan	...	28-8-87	20·59	
		Nari bank to Rindli	...	...	13·81	
		Mithri chord	...	1-1-98	1·34	
					35·74	
		TOTAL, MUSHKAF-BOLAN	...	...	...	122·48
		TOTAL OPEN MILEAGE, FRONTIER SECTION (MILITARY)	...	...	...	1,030·68
		DOUBLE LINE (COMMERCIAL AND MILITARY SECTIONS)—				
		Kiamari to Kurrachee City	...	30-6-97	3·06	
		Kurrachee City to Kurrachee Cantonment	...	13-5-61	2·30	
		Kurrachee Cantonment to Pipri	...	20-6-97	20·75	
		Pipri to Kotri	...	3-5-98	81·89	
		Meean Meer East to Meean Meer West	...	10-12-91	2·13	
		Gulistan to Chaman	...	20-9-92	36·82	
		A-bi-Gum to Kolpur	...	20-9-92	23·54	
		TOTAL DOUBLE LINE	...	...	170·49	
		GRAND TOTAL, NORTH WESTERN (COMMERCIAL AND MILITARY).	...	...	...	3,077·50
6	(*b*)	SOUTHERN PUNJAB (DELHI-SAMASATA)— (*5′ 6″ gauge.*)				
		Main line—				
		Delhi *viâ* Bhatinda to Samasata	...	10-11-97	400·55	
		Independent entrance from Delhi Brewery to Delhi	...	20-12-02	0·79	
		Branch—				
		Narwana to Kaithal—	...	1-2-99	23·38	
		TOTAL, SOUTHERN PUNJAB	...	...	...	424·72
6	(*c*)	RAJPURA-BHATINDA (PATIALA STATE RAILWAY)— (*5′ 6″ gauge.*)				
		Rajpura to Patiala	7-12-83	1-11-84	15·77	
		Patiala to Bhatinda	April '88	13-10-89	91·28	
		TOTAL, RAJPURA-BHATINDA	...	...	...	107·05
		Carried over	...	...	...	3,609·27

REMARKS.

6. Jammu and Kashmir railway (Native State section)—

(*a*) The Jammu and Kashmir railway is worked under the following contracts :—

Contract of—14th July 1888 (between the Government of India and the Kashmir Darbar) for construction and working.

18th November 1890.—Supplementary agreement (between the Government of India and the Kashmir Darbar) relative to the provision of capital.

28th April 1898.—Memorandum of revised terms (between the Government of India and the Kashmir Darbar) for working.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—The line was constructed at the cost of the Kashmir Darbar.

(ii) *Currency of contract.*—Either party can revise the contract on giving six months' notice.

(iii) *Terms of working.*—The North Western State railway work and maintain the line, including supply of rolling-stock, for 55·5 per cent. of the gross earnings (which include any single item of capital expenditure classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year.) The balance is paid to the Kashmir Darbar.

(iv) *Rates and fares.*—Rates and fares as are from time to time in force on the main line section of the North Western State railway.

7. General remarks—The North Western railway has running powers over the Ghaziabad-Delhi section, 13·00 miles, of the East Indian railway.

8. Details of construction—

(*a*) *Permanent-way—*

North Western railway.—The permanent-way is of various types. Of iron rails, there are 105·33 miles, 60lb. flat-footed; 71·45 miles, 68lb. double-headed; 29·40 miles, 60lb. bull-headed; 10·65 miles, 82lb. double-headed and 3·50 miles, 68lb. bull-headed. Of steel rails, there are 3·36 miles, 70lb. flat-footed; 389·39 miles, 62lb. flat-footed; 1,883·40 miles, 75lb. flat-footed; 8·25 miles, 64lb. double-headed; 80·55 miles, 68lb. double-headed; 92·76 miles, 75lb. double-headed; 182·57 miles, 68lb. bull-headed; 42·94 miles, 84lb. bull-headed; 23·55 miles, 100lb. flat-footed; 44·12 miles, 77½lb. bull-headed and 108·89 miles, 73lb. bull-headed. Besides the above there are 191·20 miles of double line, of which 2·13 miles are laid with 68lb. double-headed iron rails. Of steel there are 0·50 mile with 68 lb. double-headed; 141·88 miles with 75lb. flat-footed; 3·15 miles with 77½lb. bull-headed and 23·54 miles with 100lb. flat-footed. The sleepers chiefly used are of wood or cast iron (oval or round) pots and steel transverse.

Southern Punjab, Rajpura-Bhatinda, Jammu and Kashmir and Ludhiana-Dhuri-Jakhal railways.—The permanent-way consists of 75lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar. The line from Rajpura to Patiala is laid with steel rails, 68 lb. to the yard, on deodar sleepers.

Dandot Light railway.—The permanent-way consists of old metre gauge 36 lb. and 40 lb. rails laid on deodar sleepers.

Nowshera-Durgai and Khushalgarh-Kohat-That railways.—The permanent-way consists of flat-footed steel rails, 35 lb. to the yard, laid on wooden and steel sleepers, except on the Kohat-That section which will be laid partly with 25lb. and partly with 21lb. rails on steel sleepers.

(*b*) *Ballast.*—The lines are ballasted throughout with sand and broken stone.

(*c*) *Tunnels.*—*North Western railway.*—The following are the tunnels of 500 feet length and over :—Sohawa (between Taraki and Sohawa), 538·25 feet; Margalla (between Sang Jani and Serai Kala), 950 feet; Attock No. 4, near Khairabad, 677·50 feet; Attock No. 5 (between Attock and Khairabad), 722 feet; Mushkaf No. 2, near Mushkaf, 650 feet; Mushkaf No. 4 (between Mushkaf and Ocepur), 529 feet; Ocepur No. 7 (between Ocepur and Panir), 739 feet; Panir No. 9 (between Panir and Peshi), 3,218 feet; Rift No. 11 A, 571 feet; Seetal No. 12 (between Panir and Peshi), 1,035 feet; Cascade No. 14 (between Hirok and Dozan), 542 feet; Mary Jane No. 16 (between Dozan and Kolpur), 681 feet; Khojak No. 18 near Shelabagh, 12,870 feet; tunnel No. 20 near Shelabagh, 756 feet; tunnel No. 23 (between Shelabagh and Sanzal), 800 feet; Gundakinduff No. 3 (between Babar Kachh and Kochali) 569·50 feet; Kuchali Lower No. 4 (between Baberkach and Kuchali), 506 feet; Karez No. 1, near Dirgi, 806 feet; Karez No. 2 (near Dirgi) 2,034 feet; Rift bridge No. 10, 540 feet; Lower Chapper No. 11, (near Mangi) 592 feet; Iron gate No. 13 (between Dirgi and Mangi), 1,227 feet; Mudgorge No. 15 (between Mangi and Mudgorge), 1,087 feet; Mari No. 1 (near Jallar) 1,180 feet; No. 2 (near Jallar) 854 feet; No. 3 (near Jallar) 1,775 feet; No. 4 (near Jallar) 1,130 feet; No. 5 (near Jallar) 1,614 feet; No. 6 (near Jallar) 1,897 feet; No. 9, and Siala (between Chhab and Uchhri) 1,300 feet and 545 feet, respectively.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		NORTH WESTERN SYSTEM—*concld.*			Miles.	Miles.
		Brought forward .	...	...	...	3,609·27
6	(*d*)	JAMMU AND KASHMIR (KASHMIR STATE)— (*5′ 6″ gauge.*)				
		Frontier of the Kashmir State to the left bank of the Tawi river near Jammu	25-2-88	15-3-90	15·92	
		TOTAL, JAMMU AND KASHMIR .	...	...	...	15·92
6	(*g*)	NOWSHERA-DURGAI— (*2′ 6″ gauge.*)				
		Nowshera to Durgai	15-5-99	1-1-01	40·25	
		TOTAL, NOWSHERA-DURGAI .	...	...	...	40·25
6	(*e*)	LUDHIANA-DHURI-JAKHAL— (*5′ 6″ gauge.*)				
		Ludhiana *viâ* Dhuri to Jakhal	6-10-99	10-4-01	78·66	
		TOTAL, LUDHIANA-DHURI-JAKHAL .	...	...	...	78·66
6	(*h*)	DANDOT LIGHT— (*2′ 0″ gauge.*)				
		Dandot station to the mouth of the main mine .	...	5-7-89	1·89	
		Head of middle incline to shaft No. 10 of outcrop mine	...	1-7-93	1·29	
		Head of upper incline to Pidh coal platform . .	...	6-6-95	3·00	
		TOTAL, DANDOT .	...	...	...	6·18
6	(*f*)	KHUSHALGARH-KOHAT-THAL— (*2′ 6″ gauge.*)				
		Khushalgarh to Kohat	31-10-00	25-5-02	29·70	
		TOTAL, KHUSHALGARH-KOHAT-THAL .	...	...	...	29·70
		GRAND TOTAL OPEN MILEAGE, NORTH WESTERN SYSTEM	...	...	...	3,779·98
		Lines under construction or sanctioned for construction—				
6	(*a*)	NORTH WESTERN (JECH-DOAB)— (*5′ 6″ gauge.*)				
		Malakwal to Sargodha*	...	1-4-03	46·50	
		Sargodha to the Karana Hills	...	...	4·90	
		NORTH WESTERN (QUETTA-NUSHKI)—				
		From a point on the main line 12 miles south of Quetta to Nushki	28-8-02	...	82·50	
6	(*f*)	KHUSHALGARH-KOHAT-THAL— (*2′ 6″ gauge.*)				133·90
		Kohat to Thal	31-10-00	1-4-03	62·03	
		TOTAL, KHUSHALGARH-KOHAT-THAL .	...	...	...	62·03
		Total, Lines under construction .	...	...	...	195·93
		GRAND TOTAL, NORTH WESTERN SYSTEM .	...	...	...	3,975·91
6	(*g*)	**NOWSHERA-DURGAI—**				
		(*See* North Western system, page 368.)				

* Sargodha is the terminus of the permanent line; the extension to mile 51·40 will be of a temporary nature to serve the Karana shrine.

on the 31st December 1902, alphabetically arranged.

	REMARKS.
8. Details of construction—*concld.*	
(*d*) *Bridges.*—*North Western railway.*	—The following are the important bridges of 1,000′ length and over:—Chinee creek (between Kiamari and Kurrachee City), 32 spans of 40 feet; Baran *viaduct* (between Meting and Bholari), 32 spans of 45 feet; Bridge No. 135 (between Chidarzai and Ab-i-Gum), 20 spans of 60 feet; Empress (between Adamwahan and Adamwahan bridge), 16 spans of 250 feet (4,210 feet); Chenab (between Sher Shah and Chenab west bank), 17 spans of 200 feet (3,650 feet) Kaisar-i-Hind (between Ganda Singhwala and Hussainiwala), 27 spans of 144·50 feet (4,293 feet); Beas (between Beas and Beas east bank), 32 spans of 100 feet and 2 spans of 120 feet (3,828 feet); Ravi (between Shahdara and Badami Bag), 15 spans of 90 feet (1,465 feet); Sutlej (between Phillour and Ladhowal), 41 spans of 99 feet, 4 spans of 71 feet, 1 span of 99·67 feet; and 1 span of 96·67 feet (5,131 feet); Markunda (between Kersian and Barara), 9 spans of 99 feet and 2 spans of 100 feet; Jumna (between Jagadhri and Sarsawa), 22 spans of 99 feet and 2 spans of 100 feet (2,674·75 feet); Alexandra (between Wazirabad and Kathala), 28 spans of 133·50 feet (3,976 feet); Victoria (between Malakwal and Haranpur), 17 spans of 135 feet (2,720 feet); Jhelum (between Karyala and Jhelum) 50 spans of 90 feet and 1 span of 18·50 feet (4,899·42 feet); Attock (between Khairabad and Attock), 2 spans of 296·25 feet, 3 spans of 246·25 feet, and 2 spans of 40 feet (1,522 feet); Lansdowne (between Sukkur and Rohri), 1 span of 790 feet, 1 span of 270 feet, 1 span of 230 feet and 1 span of 90 feet (1,520 feet); Indus bridge at Kotri (between Kotri and Hyderabad) 5 spans of 350 feet and 1 span of 100 feet (1,948 feet); and Sohan, 1 span of 119 feet; 4 spans of 200 feet and 2 spans of 100 feet (1,204·50 feet).
	Khushalgarh-Kohat-Thal railway.—The Indus at Khushalgarh will, for the present, be crossed by a cable way, the clear cable span from saddle to saddle being 1,100 feet.
(*e*) *Fencing*—	
	North Western railway.—The main line, Ferozepore and Pathankot branches and the Ludhiana-Dhuri-Jakhal railway are, for the most part, fenced on both sides. The section from Lala Musa to Peshawar is, however, only partially fenced. The Wazirabad and Khushalgarh branches are unfenced, except at stations. The Sind-Sagar railway is unfenced, except on the portion from Sher Shah to Chenab west bank. The Kundian-Mianwali branch is unfenced throughout. The Sind-Pishin main line is fenced from Ruk Junction to Jhatpat; the remainder of the line is unfenced. The Mushkaf-Bolan line and the Chaman extension are unfenced.
	Southern Punjab railway.—The line is fenced near all large towns only.
	Rajpura-Bhatinda railway.—The line is fenced from Rajpura to Patiala only. The rest of the system is unfenced.
	Ludhiana-Dhuri-Jakhal railway.—The line is fenced throughout.
(*f*) *Curves*—	
	5′ 6″ gauge.—Of curves under a radius of 1,000 feet, there are 25·73 miles distributed over the line varying from 477 feet to 955 feet in radius.
	Dandot Light railway.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.
	Nowshera-Durgai railway.—The sharpest curve is 477 feet radius.
(*g*) *Gradients.*—Of a total open mileage of 3,779·98 miles on the system, 6·52 miles are on the ruling gradient of 1 in 25 on the 5′ 6″ gauge and 0·24 mile on 1 in 2·50 on the 2′ 0″ gauge Dandot Light railway.	

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class : No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		OUDH AND ROHILKHAND SYSTEM— (*5′ 6″ gauge.*)			Miles.	Miles.
5	(*a*)	Oudh and Rohilkhand—				
		Main line—				
		Moghal Serai to Bechupur	11-5-01	31-10-02	1·41	
		Bechupur to mile 3·25	...	22-12-62	2·14	
		From mile 3·25 south of the Dufferin bridge to the Benares Ganges station	...	1-10-87	4·25	
		From the Benares Ganges station to Benares Cantonment	...	18-6-83	1·50	
		Benares Cantonment to Rae Bareli	Oct. 1895	4-4-98	138·36	
		Rae Bareli to Lucknow	5-8-91	18-10-93	48·56	
		Lucknow to Sandila	...	1-2-72	30·00	
		Sandila to Hardoi	...	15-7-72	33·09	
		Hardoi to Shahjahanpur	...	1-3-73	39·00	
		Shahjahanpur to Faridpur	...	8-9-73	32·00	
		Faridpur to Bareilly	...	1-11-73	13·00	
		Bareilly to Moradabad (chord line *vid* Rampur)	4-12-91	8-6-94	56·07	
		Moradabad to Nagina	29-8-81	8-10-84	47·25	
		Nagina to Najibabad		1-4-85	13·70	
		Najibabad to Saharanpur		1-1-86	58·25	
					518·49	
		Loop lines—				
		Bareilly to Ukka	...	22-12-73	5·00	
		Ukka to Aonla	...	1-11-73	11·00	
		Aonla to Chandausi	...	10-6-73	27·00	
		Chandausi to Moradabad	...	28-10-72	27·50	
					70·50	
		Benares Cantonment to Shahganj	...	5-1-74	56·03	
		Shahganj to Bilwai	...	1-5-74	7·00	
		Bilwai to Malipur	...	17-4-74	9·00	
		Malipur to Akbarpur	...	2-3-74	12·00	
		Akbarpur to Fyzabad	...	10-6-73	36·00	
		Fyzabad to Bara Banki	...	25-11-72	62·00	
		Bara Banki to Lucknow	...	1-1-72	17·00	
		(*3′ 3⅜″ gauge.*)				
		Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western)	...	1-4-99	1·81	
					200·84	
					271·34	
		Total Main and Loop lines	...	...	...	789·83
		Branches—				
		Moradabad to Gajroula	8-4-97	1-4-00	33·40	
		Gajroula to Ghaziabad		25-11-00	53·37	
					86·77	
		Ajodhya ghat branch—				
		Ranupali to Ajodhya ghat	16-12-84	15-11-86	3·22	
		Bahramghat branch—				
		Bara Banki to Bahramghat	...	20-11-72	*21·52	
		Cawnpore branch—				
		Lucknow to Cawnpore	Jany. 1864	23-4-67	42·00	
		Left bank Ganges to junction with the East Indian railway at Cawnpore	...	15-7-75	†3·22	
		Passenger approach to the East Indian railway at Cawnpore	...	21-2-88	0·23	
					45·45	
		Aligarh branch—				
		Aligarh to Rajghat	...	1-2-72	30·12	
		Rajghat to Chandausi	...	28-10-72	30·48	
					60·60	
		Carried over	...	...	217·56	789·83

* Of this the length from Burhwal to Barabanki, 16·79 miles, is mixed (5′ 6″ and 3′ 3⅜″) gauge.
† Of this 0·59 mile on Cawnpore Bridge is mixed (5′ 6″ and 3′ 3⅜″) gauge.

REMARKS.

1. **Lines comprising system.**—The Oudh and Rohilkhand railway system is made up of :—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(*a*) Oudh and Rohilkhand State railway (5′ 6″ gauge) .	1,039·64	14·47	1,054·11
(*b*) Hardwar-Dehra railway (5′ 6″ gauge) . . .	32·04	...	32·04
(*c*) Cawnpore-Burhwal (3′ 3⅜″ gauge) link . . .	79·60	...	79·60
(*d*) *Allahabad-Fyzabad railway (5′ 6″ gauge)* . . .	...	94·67	94·67
Total . .	1,151·28	109·14	1,260·42

2. **Oudh and Rohilkhand State railway—**

(*a*) The Oudh and Rohilkhand railway is owned and worked by the State.

(i) *General remarks.*—The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew & Co. connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand State railway. This tramway is 3·25 miles long and is worked by manual power. It is used for goods traffic only.

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the metre gauge systems of Northern India. The mileage shown excludes 3·66 miles of the existing line of the Lucknow-Bareilly railway between Daliganj and Aishbagh, which forms a part of the alignment of this line. Starting from the north of Burhwal station, on the Oudh and Rohilkhand State railway, it runs up to Bara Banki along a third rail laid inside the Oudh and Rohilkhand State railway line, and thence on to Malhaur a separate 3′ 3⅜″ track has been laid parallel to, and 14 feet distant from, the Oudh and Rohilkhand railway track. From Malhaur it deviates to the east, over new country and joins the Lucknow-Bareilly railway at the north end of Daliganj station. Passing through Daliganj, the Lucknow-Bareilly railway is utilized to Aishbagh, where it crosses that railway and runs for 2·08 miles over new country; it joins the Cawnpore branch of the Oudh and Rohilkhand State railway at mile 2·80 from Lucknow, then runs parallel to the latter line up to the Cawnpore bridge station, from which point a third rail has been laid across the Ganges bridge. After clearing the bridge, the separate track, parallel to the Oudh and Rohilkhand railway is resumed and followed up to and through the Cawnpore (Oudh and Rohilkhand State railway) station yard, and, passing on, crosses the Grand Trunk Road, Ganges canal, and East Indian railway goods siding on a grade crossing, and joins the Cawnpore-Achnera railway at mile 83·26.

3. **Hardwar-Dehra railway—**

(*a*) The Hardwar-Dehra railway is worked under the following contract :—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

(*b*) The general conditions of the contract are as follows :—

(i) *Terms of contract.*—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital; and except for *bonâ fide* temporary purposes, at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

(ii) *Government aid.*—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

(iii) *Currency of contract.*—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—After deduction of 50 per cent. of the gross earnings for working expenses, (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		OUDH AND ROHILKHAND SYSTEM—*concld.*			Miles.	Miles.
		Brought forward	...	...	217·56	789·83
		Hardwar branch—				
		Lhaksar Junction to the left bank of the Ganges Canal Jawalapur	15-5-83	1-1-86	13·53	
	c	Left bank of the Ganges Canal near Jawalapur to Hardwar	15-5-83	20-8-86	3·53	
					17·06	
		Kotdwara branch—				
		Najibabad Junction to the right bank of the Koh river opposite Kotdwara	Oct. 1895	24-12-96	15·19	
		Total Branches	...	...	...	249·81
		TOTAL, OPEN MILEAGE, OUDH AND ROHILKHAND PROPER	...	...	...	1,039·64
5	(*b*)	HARDWAR-DEHRA— *(5′ 6″ gauge.)*				
		Hardwar to Dehra	18-11-96	1-3-00	32·04	
		TOTAL, HARDWAR-DEHRA	...	...	...	32·04
5	(*c*)	CAWNPORE-BURHWAL— *(3′ 3⅜″ gauge.)*				
		Burhwal to Daliganj	Oct. 1894	24-11-96	*34·57	
		Aishbagh to Cawnpore	Oct. 1894	25-4-97	†45·03	
		TOTAL, CAWNPORE-BURHWAL	...	...	...	79·60
		Lines under construction or sanctioned for construction—				
		OUDH AND ROHILKHAND— *(5′ 6″ gauge.)*				
		Allahabad to Phaphamau	8-11-01	...	7·62	
		Phaphamau to Siwait	8-11-01	§31-3-03	3·63	
		Siwait to Partabgarh	8-11-01	20-3-03	24·98	
		Chilbila to Sultanpur ‡	8-11-01	10-4-03	22·07	
		Sultanpur to Fyzabad	8-11-01	§31-8-03	36·37	
					94·67	
		Balamau to Madhoganj	17-9-02	...	14·47	
		TOTAL, LINES UNDER CONSTRUCTION				109·14
		GRAND TOTAL, OUDH AND ROHILKHAND SYSTEM	...	...	...	1,260·42

* Including the length Burhwal to Bara Banki,
† Including the length on the Cawnpore bridge,
‡ Excluding 2·45 miles (Partabgarh to Chilbila)
§ Probable dates of opening.

DIX 47—*continued.*

Appendix 47.
History of railways.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. **Hardwar-Dehra railway**—*concluded.*

(*b*) General conditions—*concluded.*

(vi) *Rates and fares.*—Rates and fares to be arranged between Government and the working agency within one-and-a half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand railway.

4. **General remarks.**—One mile of the Oudh and Rohilkhand railway at Cawnpore is worked over by the Indian Midland railway.

The Cawnpore-Burhwal, 3′ 3⅜″ gauge, link works over 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh.

5. **Details of construction.**—

(*a*) *Permanent-way.*—*Oudh and Rohilkhand.*—The permanent-way at first adopted for the 5′ 6″ gauge portion of the system was a 60 lb. iron rail, laid partly on cast-iron oval bowl, and partly on wrought-iron saddle-back sleepers. Up to 1889, the original iron rails had been replaced by 60 lb. steel rails, and since 1889, all renewals have been made with 75 lb. steel rails of the Indian State railway pattern, laid on metal or wooden sleepers, the former being steel bowls, or cast iron bowls locally made, the latter sál and deodar. All new lines are laid with 75 lb. steel rails and metal or wooden sleepers.

Hardwar-Dehra.—The permanent-way consists of 75 lb. flat-footed steel rails and deodar sleepers.

Cawnpore-Burhwal.—Where the line is not mixed gauge, it is laid with new 50 lb. steel rails.

(*b*) *Ballast.*—The system is ballasted throughout, either with sand or earth with a covering of broken brick or kunkur, or kunkur stone or shingle.

(*c*) *Tunnels.*—*Hardwar-Dehra.*—There are two tunnels of 500 feet length and over, one 650 feet and the other 925 feet in length between Hardwar and Raiwala, at miles 1 and 2.

(*d*) *Bridges.*—*Oudh and Rohilkhand and Cawnpore-Burhwal.*—The following are the important bridges of 1,000 feet and over:—Dufferin (between Moghal Serai and Kashi), 7 spans of 331 feet and 9 spans of 103 feet (3,507·41 feet); Sai (between Jalalganj and Zafrabad), 2 spans of 58·8 feet and 16 spans of 57·5 feet; Goomtee (between Zafrabad and Jaunpur City), 16 spans of 82 feet (1,472 feet); Ganges (between Ganges bridge and Cawnpore), 23 spans of 100 feet, spans of 96 feet and spans of 40 feet (2,850 feet); Gurrah (between Shahjahanpur and Banthra), 18 spans of 66 feet; Ramgunga (between Bareilly and Basharatgunj), 31 spans of 56 feet, 1 span of 72 feet, 1 span of 58 feet and 1 span of 55 feet (2,277 feet); Ganges (between Bahrala and Rajghat), 33 spans of 80 feet (3,040 feet); Kosi (between Rampur and Rajhera), 10 spans of 98·56 feet; Ramgunga (between Rajhera and Moradabad), 10 spans of 200 feet (2,126 feet); Bangunga (between Raisi and Lhaksar), 14 spans of 92·5 feet; Ganges (between Balawali and Raisi), 11 spans of 249·50 feet (7,886 feet); Solani (between Landhaura and Lhaksar), 11 spans of 149·58 feet (1,749·50 feet); Ganges (Garhmuktesar) 11 spans of 200 feet (2,332 feet).

(*e*) *Fencing.*—*Oudh and Rohilkhand and Cawnpore-Burhwal.*—The lines are fenced throughout.

Hardwar-Dehra.—The line is only partially fenced.

(*f*) *Curves.*—*Oudh and Rohilkhand and Cawnpore-Burhwal.*—There are no curves of a shorter radius than 1,000 feet, except on the Cawnpore-Burhwal railway where the sharpest curve has a radius of 573 feet.

Hardwar-Dehra.—There are no curves under a radius of 1,000 feet.

(*g*) *Gradients.*—Of a total open mileage on the system of 1,151·28 miles, 8·92 miles are on the ruling gradient of 1 in 75.

16·79 miles, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.
0·59 mile, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.
of existing line of the Oudh and Rohilkhand railway.

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Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No Main	Class: No Sub	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
8	(*k*)	PALANPUR-DEESA— (*See* Bombay, Baroda and Central India system, page 286.)				
4	(*c*)	PARLAKIMEDI LIGHT— (*See* Bengal-Nagpur system, page 270.)				
8	(*d*) & (*e*)	PETLAD-CAMBAY— (*See* Bombay, Baroda and Central India system, page 280.)				
22	(*e*)	PONDICHERRY— (*See* South Indian system, page 388.)				
17	(*c*)	POWAYAN LIGHT— (*See* Rohilkund and Kumaon system, page 378.)				
4	(*b*)	RAIPUR-DHAMTARI— (*See* Bengal-Nagpur system, page 270.)				
8	(*m*)	RAJPIPLA— (*See* Bombay, Baroda and Central India system, page 288.)				
6	(*c*)	RAJPURA-BHATINDA— (*See* North Western system, page 365.)				
8	(*g*)	RAJPUTANA-MALWA— (*See* Bombay, Baroda and Central India system, page 282.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
27	(*a*)	**RANAGHAT-KRISHNAGAR LIGHT—** *(2' 6" gauge.)*				
		Right bank of the Churni river (Aistala Ghat) near Ranaghat to Krishnagar	Decr. 1895	5-4-99	20·25	
		TOTAL, RANAGHAT-KRISHNAGAR LIGHT .	...	...	...	20·25
1	(*e*)	**REWAH—** (*See* East Indian system, page 322.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Ranaghat-Krishnagar Light railway—**

(*a*) The Ranaghat-Krishnagar Light railway is maintained and worked on the terms in Bengal Government, Public Works Department, Notification No. 334, dated the 16th December 1895, under the following agreement:—

Agreement of—6th September 1895 (between the Ranaghat-Krishnagar Light Railway Company and the District Board of Nadia).

(*b*) The general conditions are as follows:—

(i) *Aid by the District Board.*—The District Board make up the net earnings of the Company to Rs. 1,473 per mile per annum constructed and declared open, limited to a maximum claim of Rs. 28,000 per annum.

(ii) *Currency of agreement.*—The District Board may determine agreement by purchase, under section 41, Act III of 1883 (Bengal Code), the amount payable being calculated at 20 years' purchase of the average net annual profits to the Company during the four years preceding, together with a bonus of 20 per cent. on the amount so arrived at.

(iii) *Terms of working.*—When the net earnings of the Company, after deducting any commission payable to Agents, exceed 4 per cent. upon the capital, such surplus profits exceeding 4 per cent. and not exceeding 8 per cent. are divided equally between the Company and the District Board; and when the net earnings exceed 8 per cent. upon the capital, the Company receive one-fourth share of the surplus, the remaining three-fourths of such surplus being equally divided between the District Board and Government.

(iv) *Rates and fares.*—The same rates and fares as are in force on the Howrah-Amta railway.

(v) *General remarks.*—The line has been constructed on the old Government embankment made for the abandoned Ranaghat-Bhagwangola railway. On the 23rd February 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. A siding, 1·50 miles long, has been constructed by the Eastern Bengal State railway on the 5' 6" gauge, and runs from the Ranaghat station to the left bank of the Churni and connects with the railway by a ferry worked by the Ranaghat-Krishnagar Light railway.

2. **Details of construction.—**

(*a*) *Permanent-way.*—The permanent-way consists of 25 lb. steel rails, Vignole's pattern, and cross sleepers of pyinkado, 9 per rail of 24 feet.

(*b*) *Ballast.*—The line is ballasted throughout with brick.

(*c*) *Fencing.*—The line is unfenced.

(*d*) *Curves.*—The sharpest curve is of 600 feet radius.

(*e*) *Gradients.*—Of a total length of 20·25 miles, 0·80 mile is on the ruling gradient of 1 in 300.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		ROHILKUND AND KUMAON SYSTEM—				
		(3′ 3⅜″ gauge.)				
17	(*a*)	COMPANY'S SECTION—				
		Bhoojeepura to Kathgodam	1882	12-10-84	53·92	
		TOTAL COMPANY'S SECTION .	...	...	...	53·92
17	(*b*)	LUCKNOW-BAREILLY STATE RAILWAY SECTION—				
		(3′ 3⅜″ gauge.)				
		Main line—				
		Lucknow to Sitapur	8-10-84	15-11-86	55·00	
		Sitapur to Lakhimpur		15-4-87	28·50	
		Lakhimpur to Gola Gokaran Nath		15-12-87	21·50	
		Gola Gokaran Nath to Pilibhit	27-12-89	1-4-91	57·55	
		Pilibhit to Bhoojeepura	Bareilly to mile 4·62 on 17-3-82.	15-11-84	24·00	
		Bhoojeepura to Bareilly	Mile 4·62 to Pilibhit, 24-2-83.	12-10-84	12·00	
		Total Main line .	...	...	...	198·55
		Branches—				
		Bareilly grain siding	24-3-92	1-4-94	1·75	
		Dudhwa branch—				
		Mailani to Sarda	Mailani to Dudhwa, 3-12-90; Dudhwa to Sonaripur 2-11-93	1-1-93	15·00	
		Sarda to Sohela		10-3-93	8·50	
		Sohela to Sonaripur		18-3-94	7·37	
		Total Branches .	...	...	...	32·62
		TOTAL OPEN MILEAGE, LUCKNOW-BAREILLY .	...	...	...	231·17
		Line under construction or sanctioned for construction—				
		Dudhwa branch—				
		Dudhwa to Mohan river.	12-4-01	3-4-03	5·93	
		Total Line under construction .	...	...	...	5·93
		TOTAL, LUCKNOW-BAREILLY SECTION .	...	...	...	237·10
17	(*c*)	POWAYAN LIGHT— *(2′ 6″ gauge.)*				
		Shahjahanpur to Powayan	Jany. 1889.	17-6-90	17·00	
		Powayan to Khotar		19-5-91	14·00	
		Khotar to Mailani	Feby. 1894.	22-12-94	8·50	
		TOTAL, POWAYAN LIGHT .	...	...	...	39·50
		GRAND TOTAL, ROHILKUND AND KUMAON SYSTEM .	...	...	...	330·52

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Rohilkund and Kumaon railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	53·92	...	53·92
(*b*) Lucknow-Bareilly State railway (3′ 3⅜″ gauge)	231·17	5·93	237·10
(*c*) Powayan Light railway (2′ 6″ gauge)	39·50	...	39·50
Total	324·59	5·93	330·52

2. **Rohilkund and Kumaon and Lucknow-Bareilly State railways.**—

(*a*) The Rohilkund and Kumaon, and Lucknow-Bareilly State railways are worked under the following contracts—

Contract of—12th October 1882.—Rohilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly State railway and the Rohilkund and Kumaon Company's line as one system. (Principal contract).

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

(*b*) The general conditions of the contracts are as follows:—

(i) *Government aid.—Company's section.*—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased after 31st December 1894. Land was provided free, subject to the condition that the Company pay on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantees as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was also provided free of charge.

Note.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under agreement dated the 5th February 1901.

(ii) *Terms of contract.*—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

(iii) *Currency of contracts.*—

Rohilkund and Kumaon railway.—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932) by giving 12 months' notice. If the contract terminate by such notice or by efflux of time, Government is to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. The Government may also determine the contract at any time on six months' notice, if the Company fail to observe their obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove their property within nine months from termination of contract, otherwise it becomes the property of the Government.

Lucknow-Bareilly State railway.—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year by giving twelve months' notice. In the event, however, of the original contract dated the 12th October 1882 terminating by efflux of time or under notice of purchase or notice of determination, this contract *ipso facto* also terminates at the same time. Government may also terminate the contract if the Company fail to observe their obligations after six months' notice. On determination of the contract, Government resume possession of the State railway on payment to the Company of the amount of the capital received or take over their liabilities with respect to such capital.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.—Company's section.*—During the period that the Government are liable to pay interest after deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently, half the surplus profits, after 5 per cent.

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as their share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

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History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		ROHILKUND AND KUMAON SYSTEM—*concld.*				
16	(*c*)	**SAGAULI-RAXAUL—** (*See* Bengal and North-Western system, page 260.)				
10	(*d*)	**SHORANUR-COCHIN—** (*See* Madras system, page 348.)				
1	(*c*)	**SOUTH BEHAR—** (*See* East Indian system, page 322.)				

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REMARKS.

2. **Rohilkund and Kumaon and Lucknow-Bareilly State railways**—*concluded.*

(*b*) General conditions—*concluded.*

(v) *Terms of working*—concluded.

for the year (within a limit of £ 5,000 for each half-year) has been appropriated to the Company, is to be applied in repayment to Government of arrears of Guaranteed interest and of interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897, Government are to receive half the surplus profits in excess of 6 per cent.

Lucknow-Bareilly section.—The working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied:—in meeting payment of interest on the debentures, and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; in payment to Government of interest at 4 per cent. on their capital in the undertaking; the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (1) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

(vi) *Rates and fares*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

3. **Powayan Light railway**—The working and maintenance of this railway was taken over by the Rohilkund and Kumaon Railway Company from the 17th December 1900.

4. **General remarks.**—The Rohilkund and Kumaon railway works over 12·00 miles of the Lucknow-Bareilly State railway from Bhojeepura to Bareilly.

The following lengths of the Lucknow-Bareilly State railway are worked over by foreign lines—Daliganj to Aishbagh, 3·66 miles by the Bengal and North-Western railway; and Bhojeepura to Bareilly 12·00 miles by the Rohilkund and Kumaon railway.

5. **Details of construction.**—

(*a*) *Permanent-way.*—The line is laid principally with 41¼lb. steel rails (with the exception of the old Oudh and Rohilkhand railway 60lb. steel rails between Daliganj and Lucknow Junction), and sâl, asna and deodar sleepers. On the Powayan Light railway, the rails are flat-bottomed steel, weighing 25lb. to the yard, laid on sâl sleepers.

(*b*) *Ballast.*—The ballast consists of brick, shingle and kunker. The Powayan Light railway is earth ballasted.

(*c*) *Fencing.*—The system is unfenced except at stations.

(*d*) *Curves.*—The only curve under a radius of 1,000 feet occurs between Lucknow Junction and Lucknow City, the length of which is 0·63 mile.

(*e*) *Gradients.*—Of a total mileage of 324·59 miles on the system, 3·00 miles are on the ruling gradient of 1 in 70.

Appendix 47.
History, of railways.

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History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
35	(*a*)	**SHAHDARA-SAHARANPUR LIGHT—** *(2' 6" gauge.)*			Miles.	Miles.
		Shahdara to Saharanpur	4-1-02	...	95·00	
		Baraut to Meerut	4-1-02	...	30·00	
		Total, Shahdara-Saharanpur Light	...	...	...	125·00

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on the 31st December 1902, alphabetically arranged.

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Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		SOUTH INDIAN SYSTEM— *(3′ 3⅜″ gauge).*			Miles.	Miles.
22	(*a*)	SOUTH INDIAN—				
		MADRAS-TUTICORIN SECTION—				
		Main line—				
		Madras (Beach Joint to Beach old)	1900	15-1-00	0·33	
		Madras Beach old to Park zero		1-1-79	1·60	
		Madras (Park zero) to Tindivanam	25-2-73	1-9-76	76·05	
		Tindivanam to Cuddalore old town		1-1-77	52·01	
		Cuddalore old town to Porto Novo		1-7-77	17·15	
		Porto Novo to Chidambaram		1-10-78	6·73	
		Chidambaram to Coleroon		1-7-79	4·57	
		Coleroon to Shiyali	12-6-74	1-1-78	6·06	
		Shiyali to Mayavaram		1-7-77	12·24	
		Mayavaram to Tanjore		15-2-77	43·76	
		Tanjore to Trichinopoly Junction	May '59	11-3-62	31·14	
		Trichinopoly Junction to Madura	2-3-72	1-9-75	96·04	
		Madura to Tuticorin		1-1-76	98·71	
		Tuticorin to Foreshore	1899	7-8-99	0·41	
		Total Main line	...	...	...	446·80
		Branches—				
		Arkonam branch—				
		Chingleput to Walajabad	Nov. '79	1-8-80	13·66	
		Walajabad to Conjeeveram		1-1-81	7·94	
		Conjeeveram to Arkonam	11-3-64	8-5-65	17·65	
					39·25	
		Pondicherry branch—				
		Villupuram to Gingee river, inclusive of bridge over the river	May '79	15-12-79	16·47	
		Nagore branch—				
		Tanjore to Tiruvallur	May '59	2-12-61	33·83	
		Tiruvallur to Negapatam		15-7-61	14·33	
		Negapatam to Nagore	11-11-98	1-12-99	4·67	
					52·83	
		Pulliarpati Quarry branch—				
		Tanjore to buffer end, Pulliarpati quarry	1898	1-7-98	4·57	
		Erode branch—				
		Trichinopoly Junction to Fort	May '59	11-3-62	2·52	
		Trichinopoly Fort to Karur		3-12-66	44·65	
		Karur to Kodumudi		1-7-67	16·70	
		Kodumudi to Erode		1-1-68	23·54	
					87·41	
		Pamban branch—				
		Madura to Mandapam	21-4-99	1-8-02	89·50	
		Tinnevelly branch—				
		Maniyachi to Tinnevelly	2-3-72	1-1-76	18·23	
		Wharf branch—				
		Cuddalore old town to Wharf	1899	7-8-99	1·54	
		Capper quarry branch—				
		Junction with main line to Capper Quarry	1900	15-4-00	0·86	
		Salt branch—				
		Tuticorin to buffer end of Sevandacolam salt siding.	1899	12-11-99	2·14	
		Junction of Sevandacolam salt siding to buffer end of Livingepuram.		12-11-99	0·25	
					2·39	
		Total Branches	...	...	...	313·05
		TOTAL, MADRAS-TUTICORIN SECTION	...	...	...	759·85
		Carried over	...	...	...	759·85

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on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The South Indian railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) South Indian railway (3′ 3⅜″ gauge)	1,123·13	17·38	1,140·51
(*b*) Tinnevelly-Quilon (Travancore) branch (British section) (3′ 3⅜″ gauge)	19·05	31·33	50·38
(*c*) Tanjore District Board (Mayavaram-Mutupet) railway (3′ 3⅜″ gauge)	71·11	33·88	104·99
(*d*) Karaikkal-Peralam railway (3′ 3⅜″ gauge)	14·65	...	14·65
(*e*) Pondicherry railway (3′ 3⅜″ gauge)	7·85	...	7·85
(*f*) *Tinnevelly-Quilon (Travancore) branch (Native State section)* (3′ 3⅜″ *gauge*)	...	57·95	57·95
Total	1,235·79	140·54	1,376·33

2. South Indian railway.—

(*a*) The South Indian railway is worked under the following contracts—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.
27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

(*b*) The general conditions of the contracts are as follows :—

(i) *Terms of contract.*—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock, which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required to be either provided by the Secretary of State, or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

	£
* Company's stock at date of purchase ...	3,208,280
Premium ...	989,277
	4,197,557

(ii) *Currency of contract.*—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe their obligations, or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract, Government are to take possession of the railway and all its appliances, repaying at par to the Company their capital of £1,000,000 and any further capital raised by them and paid to Government.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of—the equivalent in rupees of interest at 4½ per cent. on £425,000 irredeemable debenture stock of the old Company (at "the prescribed rate" of exchange); 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts, after deducting the sums of Rs. 1,40,00,000 and Rs. 59,50,000 (the contract equivalents of the Company's capital and of the irredeemable debenture stock respectively); and in payment of the residue to Government and the Company in the ratio of the respective capital amounts contributed by each.

(v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company are permitted to vary their rates.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		SOUTH INDIAN SYSTEM—*continued.* (*3′ 3⅜″ gauge.*)				
22	(*a*)	SOUTH INDIAN—*concluded.*				
		Brought forward . .	...	...	...	759·85
		VILLUPURAM-DHARMAVARAM SECTION—				
		Main line—				
		Villupuram to Tiruvannamalai . . .	Nov. '88	17-11-90	41·80	
		Tiruvannamalai to Pakala		18-3-91	96·55	
		Pakala to Vayalpad		1-1-92	46·69	
		Vayalpad to Dharmavaram		1-3-92	94·14	
		Total Main line .	...	...	279·18	
		Branch—				
		Gudur branch—				
		Pakala to Tirupati West	Nov. '88	18-3-91	25·05	
		Tirupati to Gudur	15-11-83	15-9-87	59·05	
		Total Branch .	...	...	84·10	
		TOTAL, VILLUPURAM-DHARMAVARAM SECTION .	...	...	...	363·28
		TOTAL OPEN MILEAGE, SOUTH INDIAN PROPER .	...	...	...	1,123·13
		Lines under construction or sanctioned for construction—				
		Marina loop— Saidapet to Madras Beach	9-12-02	...	8·38	
		Pamban branch— Tiruppachetti to Sivagunga	21-4-99	...	9·00	
		Total Lines under construction .	...	...	...	17·38
		GRAND TOTAL, SOUTH INDIAN PROPER .	...	...	...	1,140·51
22	(*c*)	Tinnevelly-Quilon (Travancore branch)—(British section).				
		Tinnevelly to Kallidaikurichi . . .	21-4-99	1-6-02	19·05	
		TOTAL OPEN MILEAGE .	...	...	...	19·05
		Line under construction or sanctioned for construction—				
		Kallidaikurichi to British frontier near Shencottah	21-4-99	*1-4-03	31·33	
		Total, Line under construction .	...	...	...	31·33
		TOTAL, TINNEVELLY-QUILON (TRAVANCORE BRANCH)—(BRITISH SECTION)	...	...	...	50·38
		Carried over . .	...	...	...	1,190·89

* Probable date of opening.

REMARKS.

2. **South Indian railway**—*concluded.*

(vi) *General remarks.*—The line from Negapatam to Erode was commenced in May 1859 by the late Great South Indian Railway Company and was completed on the 5′ 6″ gauge. It was converted to 3′ 3⅜″ gauge in sections as follows:—Negapatam to Trichinopoly, June and July 1875; Trichinopoly to Karur, July 1879; Karur to Erode, December 1879. The line from Arkonam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system and was completed on the 3′ 6″ gauge. It was converted to 3′ 3⅜″ gauge in July 1878.

On the 1st January 1891, the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal State railway, to a new Company called the "South Indian Railway Company Limited," the whole now forming the South Indian railway system.

The Pamban branch has been constructed with the object of placing the island of Rameswaram in communication with the South Indian railway system.

3. **The Tanjore District Board (Mayavaram-Mutupet) railway**—

(*a*) The Tanjore District Board (Mayavaram-Mutupet) railway is worked under the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—Land was provided free of cost.

(ii) *Terms of contract.*—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900, the Tanjore District Board took over the Government section and became sole owners, the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

(iii) *Currency of contract.*—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on twelve months' notice, by assuming liability for any debentures which the District Board may have issued, and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances, this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R.C., dated 5th March 1898).

(iv) *Terms of working.*—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) *plus* 5 per cent. on the gross receipts of the line for use of rolling-stock, and in addition all other charges properly debitable to revenue.

(v) *Rates and fares.*—To be agreed upon from time to time between Government and Company within the maxima and minima in force on the undertaking.

(vi) *General remarks.*—The money for this railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money, either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by guaranteeing a company.

4. **Karaikkal-Peralam railway.**—

(*a*) The Karaikkal-Peralam railway is worked under the following contract:—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

Appendix 47.
History of railways.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage	Total.
					Miles.	Miles.
		SOUTH INDIAN SYSTEM—*continued.* (*3′ 3⅜″ gauge.*)				
		Brought forward . .	...	...	...	1,190·89
22	(*b*)	TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET) RAILWAY—				
		Tiruvallur to Mutupet	June 1890	2-4-94	54·08	
		Mayavaram to Tiruvallur	10-8-91			
		Mutupet to Pattukkottai	...	20-10-02	17·03	
		Total open mileage .	...	...	...	71·11
		Lines under construction or sanctioned for construction—				
		Pattukkottai to Arantangi	15-11-00	* 30-9-03	28·35	
		Thambikkottai salt siding	19-12-00	...	0·63	
		Adirampatnam salt siding		...	1·00	
		Arantangi quarry branch		...	3·90	
		Total Lines under construction .	...	...	...	33·88
		TOTAL, TANJORE DISTRICT BOARD RAILWAY .	...	...	...	104·99
22	(*d*)	KARAIKKAL-PERALAM— (*3′ 3⅜″ gauge.*)				
		Karaikkal to Peralam	July 1895	14-3-98	14·65	
		TOTAL, KARAIKKAL-PERALAM .	...	...	...	14·65
22	(*e*)	PONDICHERRY— (*3′ 3⅜″ gauge.*)				
		Left bank of Gingee river to Pondicherry . . .	June 1878	15-12-79	7·85	
		TOTAL, PONDICHERRY . .	...	...	...	7·85
		Line under construction or sanctioned for construction—				
22	(*f*)	TINNEVELLY-QUILON (TRAVANCORE BRANCH)—(Native state section)— (*3′ 3⅜″ gauge.*)				
		Quilon to Ponalur	15-5-99	*1-4-03	57·95	
		Ponalur to the frontier of the Travancore State near Shencottah.		*1904		
		TOTAL, TINNEVELLY-QUILON (NATIVE STATE SECTION) .	...	...	...	57·95
		GRAND TOTAL, SOUTH INDIAN SYSTEM .	...	...	...	1,376·33

* Probable date of opening,

on the 31st December 1902, alphabetically arranged.

REMARKS.

4. Karaikkal-Peralam railway—*concluded.*

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietory rights remain vested in the British Government.

(ii) *Currency of contract.*—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

(iii) *Terms of working.*—The line is worked on the same percentage of working expenses to the gross earnings as obtains on the undertaking, plus 5 per cent. on the gross receipts of the line for the use of the main line rolling stock and Rs. 1,500 per annum for interest on the main line Revenue Stores and Stores and workshop buildings and machinery. If at any time the Company can show that the working of the railway involves an actual loss on the percentage terms, the Government of the French Settlements in India has to make good the loss.

(*c*) *Rates and fares.*—Same as on the undertaking.

(*d*) *General remarks.*—The line is partly in British and partly in French territories and was constructed with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

5. Pondicherry railway—

(*a*) The Pondicherry railway is worked under the following contract:—

Contract of—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

(*b*) The general conditions of the contract are as follows:—

(i) *Currency of contract.*—The contract will be terminable by either party, on giving 6 months' notice expiring on the 31st December in any year.

(ii) *Terms of working.*—The line is worked for the same percentage of gross receipts as obtains on the undertaking, including the Pondicherry line.

(iii) *Rates and fares.*—Same as on the South Indian railway.

(iv) *General remarks.*—The line is in French territory and was constructed with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

6. Tinnevelly-Quilon (Travancore branch)—(British and Native state sections).—

(*a*) The Travancore branch is worked under the following contract:—

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—Government guarantee interest on the debentures to be raised by the South Indian Railway Company for the construction of the line.

(ii) *Currency of contract.*—The contract will remain in force until the principal contract for working the undertaking shall terminate.

(iii) *Terms of working.*—The branch is to be worked on the same percentage of working expenses to gross earnings as obtains on the undertaking subject to the maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore, the latter has underwritten the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency met by the Native State.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		SOUTH INDIAN SYSTEM—*concluded.*				

on the 31st December 1902, alphabetically arranged.

REMARKS.

6. **Tinnevelly-Quilon (Travancore branch)—(British and Native state sections).**—*concluded.*

(iv) *General remarks.*—The line is partly in British and partly in Native State territories, and is being constructed with the object of placing the Native State of Travancore in communication with the South Indian railway system.

7. **Details of construction—**

(*a*) *Permanent-way.*—The main line from the Beach at Madras to Tuticorin is laid with 50lb. rails on cast-iron pots; the rest of the line is laid with various descriptions of rails and sleepers.

(*b*) *Ballast.*—The line is ballasted.

(*c*) *Bridges.*—The following are the important bridges of 1,000 feet length and over: Palar (between Kolatur North and Padalam), 18 spans of 120 feet; Ponniar (between Serndanur and Panruti), 17 spans of 100 feet; Gadilam (between Nellikuppam and Cuddalore N. T.), 15 spans of 100 feet; New Coleroon (between Chidambaram and Coleroon), 14 spans of 150 feet; Vaigai (between Samayanallur and Madura), 15 spans of 50 feet; Gingee (between Kandamangalam and Villianur), 7 spans of 150 feet; Amravati (between Karur and Pugalur), 20 spans of 50 feet; Palar (between Vellore and Katpadi), 13 spans of 150 feet.

(*d*) *Fencing.*—The South Indian and Pondicherry railways have aloe and wire fencing (with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and Pamban branch which are unfenced). The Tanjore District Board (Mayavaram-Puttukkottai) and Karaikkal-Peralam railways and Tinnevelly-Kallidaikurichi section are unfenced.

(*e*) *Curves.*—There are only 1·45 miles of curves under a radius of 1,000 feet.

(*f*) *Gradients.*—Of a total open mileage of 1,235·79 miles on the system, 3·56 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM— (*3' 3⅜" gauge.*)				
21	(*a*) c	COMPANY'S SECTION—				
		Main Line—				
		Frontier to Castle Rock	...	3-2-88	3·63	
		Castle Rock to Deuli	...	15-6-87	2·75	
		Deuli to Dharwar	...	24-1-87	56·00	
		Dharwar to Hospet	Bellary to Hubli, Nov. '81.	1-7-85	101·25	
		Hospet to Bellary	Bellary to Hubli, Nov. '81.	24-3-84	40·51	
		Bellary to Guntakal	...	16-5-87*	29·99	
		Guntakal to Nandyal	26-9-83	11-7-87	90·25	
		Nandyal to Cumbum	26-9-83	15-6-90	63·18	
		Cumbum to Tadepalli	26-9-83	3-10-89	122·41	
		Total Main line	...	...	...	509·97
		Branches—				
		Harihar branch—				
		Hubli to Harihar (temporary station)	...	18-10-86	81·00	
		Temporary station to permanent station	...	21-2-89		
		Bijapur branch—				
		Gadag to Hotgi	April 1879	1-8-84	173·08	
		Poona branch—				
		Londa to Belgaum	...	21-3-87	33·00	
		Belgaum to Miraj	29-11-83	22-12-87	85·01	
		Miraj to Koregaon	29-11-83	2-5-87	76·00	
		Koregaon to Ghorpuri	29-11-83	18-11-86	83·07	
		Ghorpuri to Poona	29-11-83	4-10-90	0·91	
					277·99	
		Total Branches	...	...	...	532·07
		GRAND TOTAL, COMPANY'S SECTION	...	...	...	1,042·04
		Carried over	...	..	...	1,042·04

* Dates of opening of original 5' 6" gauge line: Guntakal to Virapur, 16th January 1871; Virapur to Bellary, 1st March 1871.

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. **Lines comprising system.**—The Southern Mahratta railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(*a*) Southern Mahratta railway (3′ 3⅜″ gauge)	1,042·04	...	1,042·04
(*b*) Mysore section (Southern Mahratta) (3′ 3⅜″ gauge)	296·22	...	296·22
(*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)	119·50	...	119·50
(*d*) Hindupur (Yesvantpur-Mysore Frontier) railway (3′ 3⅜″ gauge)	51·35	...	51·35
(*e*) Birur-Shimoga railway (3′ 3⅜″ gauge)	37·92	...	37·92
(*f*) Kolhapur railway (3′ 3⅜″ gauge)	29·27	...	29·27
(*g*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)	15·80	...	15·80
(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·11	...	51·11
(*i*) *Bellary-Rayadrug (3′ 3⅜″ gauge)*	...	33·00	33·00
(*j*) *Hospet-Kottur (3′ 3⅜″ gauge)*	...	38·10	38·10
Total	1,643·21	71·10	1,714·31

2. **Southern Mahratta railway—**

(*a*) The Southern Mahratta railway is worked under the following contracts :—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

(*b*) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Interest in sterling on share capital at 3½ per cent. is guaranteed and an additional ½ per cent. until 31st December 1890. Land was also provided free.

(ii) *Terms of contract.*—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

(iii) *Currency of contracts.*—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (*i.e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the Company fail to observe their obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice, Government is to repay to the Company the amount of the par value of the share capital paid to Government.

(iv) *Power of Company to surrender contracts.*—The Company may determine the contracts on the 30th June in any year, by giving one year's previous notice.

(v) *Terms of working.*—Up to the 31st December 1890 after deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts belonged to Government unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890, three-fourths of the net receipts go to Government and one-fourth to the Company.

(vi) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

(vii) *General remarks.*—The Bellary branch of the Madras railway from Bellary to Guntakal was made over to the Southern Mahratta Railway Company on the 1st February 1887, and was converted from 5′ 6″ to 3′ 3⅜″ gauge on the 16th May 1887.

3. **Mysore section (Southern Mahratta)—**

(*a*) The Mysore section is worked under the following contract :—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

(*b*) The general conditions of the contract are as follows :—

(i) *Government aid.*—Guarantee of interest in sterling at 4 per cent. on £ 1,200,000 debenture stock.

Appendix 47.
History of railways.

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History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—*continued.* (*3' 3⅜" gauge.*)				
		Brought forward .	...	...	...	1,042·04
21[c]	(*b*)	MYSORE SECTION—				
		Mysore to Mandya	20-9-77	25-2-82	28·11	
		Mandya to Channapatna		20-3-81	23·25	
		Channapatna to Bangalore		1-2-81	34·75	
		Bangalore to Tumkur	6-10-82	11-8-84	43·00	
		Tumkur to Gubbi	18-1-84	26-12-84	11·00	
		Gubbi to Birur	...	12-8-89	76·57	
		Birur to Harihar	...	[c] 21-2-89	79·68	
		TOTAL, MYSORE SECTION .	...	...	...	296·22
		Carried over .	...	...	...	1,338·26

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. **Mysore section (Southern Mahratta)**—*concluded.*

(*b*) General conditions—*concluded.*

(ii) *Terms of contract.*—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

(iii) *Currency of contract.*—Government may determine the contract at any time, on six months' notice should the Company fail to observe their obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta system determine, then this contract also determines. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liability in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.

(vi) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

4. **Guntakal-Mysore Frontier railway.**—

(*a*) The Guntakal-Mysore Frontier section is worked under the following contract:—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line is the property of Government.

(ii) *Currency of contract.*—The same as the Southern Mahratta railway.

(iii) *Power of Company to surrender contract.*—The same as the Southern Mahratta railway.

(iv) *Terms of working.*—The working expenses of the entire system of railways worked by the Company (including this railway) exclusive of Government supervision charges of the Southern Mahratta Railway and Mysore section are divided between this railway and the other railways worked, in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

5. **Hindupur (Yesvantpur-Mysore Frontier) and Birur-Shimoga railways**—

(*a*) The Hindupur and Birur-Shimoga railways are worked under the following contract:—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working and maintenance.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—The lines are the property of the Mysore State.

(ii) *Currency of contract.*—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract, the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway at a valuation.

(iii) *Terms of working.*—The working expenses of the system excluding expenditure on New Minor Works are divided between these railways and the others, comprising the system in proportion to their gross earnings. The company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000 or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Mysore Durbar.

(iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—*continued.*				
		Brought forward .	...	...	...	1,338·26
21	(c)	GUNTAKAL-MYSORE-FRONTIER— (*3′ 3⅜″ gauge.*)				
		Guntakal to Dharmavaram	June '89	1-3-93	62·95	
		Dharmavaram to Hindupur	26-1-91	23-4-93	49·28	
		Hindupur to Mysore Frontier	August '91	17-9-93	7·27	
		TOTAL, GUNTAKAL-MYSORE FRONTIER .	...	...	...	119·50
21	(d)	HINDUPUR (YESVANTPUR-MYSORE FRONTIER)— (*3′ 3⅜″ gauge.*)				
		Yesvantpur to Dodballapur	March '90	15-12-92	19·93	
		Dodballapur to Mysore Frontier	March '90	17-9-93	31·42	
		TOTAL, HINDUPUR .	...	...	...	51·35
21	(e)	BIRUR-SHIMOGA— (*3′ 3⅜″ gauge.*)				
		Birur to Shimoga	12-8-96	1-12-99	37·92	
		TOTAL, BIRUR-SHIMOGA .	...	...	...	37·92
21	(f)	KOLHAPUR— (*3′ 3⅜″ gauge.*)				
		Kolhapur to Miraj	February '88	21-4-91	29·27	
		TOTAL, KOLHAPUR .	...	...	...	29·27
21	(g)	MYSORE-NANJANGUD— (*3′ 3⅜″ gauge.*)				
		Mysore to Nanjangud	...	1-12-91	14·90	
		Nanjangud station to Nanjangud town . . .	...	12-7-99	0·76	
		TOTAL, MYSORE-NANJANGUD .	...	...	...	15·80
21	(h)	WEST OF INDIA PORTUGUESE— (*3′ 3⅜″ gauge.*)				
		Mormugao to Sonauli.	18-4-88	17-1-87	41·00	
		Sonauli to the Portuguese frontier	18-4-88	3-2-88	10·11	
		TOTAL, WEST OF INDIA PORTUGUESE .	...	...	...	51·11
		GRAND TOTAL, OPEN MILEAGE, SOUTHERN MAHRATTA SYSTEM				1,643·21
		Lines under construction or sanctioned for construction—				
		Famine lines (Madras Presidency)—				
21	(i)	BELLARY-RAYADRUG— (*3′ 3⅜″ gauge.*)				
		Bellary to Rayadrug	24-10-02	...	33·00	
21	(j)	HOSPET-KOTTUR— (*3′ 3⅜″ gauge.*)				
		Hospet to Kottur	24-10-02	...	38·10	
		TOTAL, LINES UNDER CONSTRUCTION .	...	...	...	71·10
		GRAND TOTAL, SOUTHERN MAHRATTA SYSTEM .	...	...	...	1,714·31

on the 31st December 1902, alphabetically arranged.

REMARKS.

6. Kolhapur railway.—

(*a*) The Kolhapur railway is worked under the following contract:—

Contract of—17th July 1891 (between the Kolhapur Darbar and the Southern Mahratta Railway Company) for working and maintenance.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line is the property of the Kolhapur State.

(ii) *Currency of contract.*—The contract may be terminated, upon six months' notice, by either party.

(iii) *Terms of working.*—The working expenses of the system excluding Government supervision charge and New Minor Works are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exeeeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Kolhapur Durbar.

(iv) *Rates and fares.*—The same as in force on the Southern Mahratta railway.

7. Mysore-Nanjangud railway.—

(*a*) The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

(*b*) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line is the property of the Mysore State.

(ii) *Currency of contract.*—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination, the Company make over to the Mysore Government the railway and works and pay to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed, to be taken over by the Mysore Government at a valuation.

(iii) *Terms of working.*—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between the Nanjangud railway and the other railways comprised in the Company's system in the proportion which the gross receipts of the Nanjangud railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of the Nanjangud railway is retained by the Company, and the residue paid to the Mysore Government.

(iv) *Rates and fares.*—To be fixed by the Company with the approval of Government.

8. West of India Portuguese railway—

(*a*) The West of India Portuguese railway is worked under the following contracts:—

Contract of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

18th March 1902, between the Southern Mahratta Railway Company and the West of India Potuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao.

Appendix 47.
History of railways.

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History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		SOUTHERN MAHRATTA SYSTEM—*continued.*			Miles.	Miles.

	REMARKS.
8. West of India Portuguese railway—*concluded.*	
	(*b*) The general conditions of the contracts are as follows :—
	(i) *Government (Portuguese) aid.*—Five per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £ 800,000 and 6 per cent. on £ 550,000.
	(ii) *Currency of contracts.*—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and West of India Portuguese Railway Companies which took effect from the 1st July 1902 is to continue in force, for five years subject to amendment or determination after two years on six months' notice by either party.
	(iii) *Power of Company to surrender contract.*—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company can at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on their capital. On surrender of the contract, the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.
	(iv) *Terms of working by Southern Mahratta Railway Company.*—The West of India Portuguese and Southern Mahratta railways are worked as one concern and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) divided in proportion to their gross earnings, the net earnings to be applied—In payment of a contribution sanctioned by the Portuguese Government towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.
	The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance *plus* 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese railway, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.
	(v) *Rates and fares.*—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.
	The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.
	(vi) *General remarks.*—The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.
9. Bellary-Rayadrug—and 10. Hospet-Kottur—	With the object of increasing the facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to periods of scarcity, sanction was accorded to the construction of these feeder lines (see also Madras railway system).
11. General remarks—The Southern Mahratta railway has running powers over 2·97 miles of the North-East line, Madras railway, from Tadepalli to Bezwada.	

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History of railways.

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History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—*concluded.*				
6	(*b*)	**SOUTHERN PUNJAB (DELHI-SAMASATA).** (*See* North Western system, page 366.)				
22	(*b*)	**TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET RAILWAY)—** (*See* South Indian system, page 388.)				
8	(*b*)	**TAPTI VALLEY.** (*See* Bombay, Baroda and Central India system, page 280.)				

DIX 47—*continued.*

Appendix 47.
History of railways.

on the 31st December 1902, alphabetically arranged.

	REMARKS.
12. Details of construction—	
(*a*) *Permanent-way—*	
	Southern Mahratta railway.—The permanent-way consists of 41¼lb. steel rails on wooden and steel sleepers, except for the portion from the Portuguese Frontier to Castle Rock which is laid with 62lb. rails. A portion of the line is being relaid with 50lb. rails.
	Mysore section, Birur-Shimoga and Mysore-Nanjangud railways.—The permanent-way consists of 41¼lb. steel rails laid on Mysore teak sleepers. The Bhadra bridge is laid with 50lb. steel rails.
	Guntakal-Mysore Frontier and Kolhapur railways.—The permanent-way consists of 41¼lb. flat-footed steel rails laid on steel sleepers.
	Hindupur railway.—The rails used are of the State railway type, weighing 50lb. to the yard. on the ghat section, 11 miles in length, and 41¼lb. to the yard on the remainder of the line. The sleepers are of Mysore teak throughout.
	West of India Portuguese railway.—The permanent-way throughout is of 62lb. State railway type with ten sleepers to the rail. The sleepers used are creosoted pine, sal, teak and jamba.
(*b*) *Ballast.*—The system is ballasted throughout.	
	West of India Portuguese railway.—The line is ballasted with laterite and blue stone.
(*c*) *Tunnels.*—The following are the important tunnels of 500 feet length and over :—Castle Rock (between Dadrajar and Castle Rock), 1,242 feet; Nandiconama (between Chelama and Diguvametta), 1,527 feet; tunnel at mile 265½, 560 feet; tunnel No. 1 (between Phursangi and Alandi), 536 feet; tunnel No. 2 (between Rajiwadi and Alandi), 630 feet; and tunnel at mile 214·2 (between Wathar and Adhorki), 500 feet. There are two other tunnels aggregating 684 feet in length.	
	West of India Portuguese railway.—The following are important tunnels of 500 feet length and over :—Tunnel No. 1 (below Dudhsagar) 504 feet; Tunnel No. 5 (near Dudhsagar) 665 feet; and Tunnel No. 10 (above Dudhsagar) 842 feet. There are nine other tunnels and 2 covered ways, 2 of which are over 500 feet in length.
(*d*) *Bridges.*—The important bridges of 1,000 feet length and over are as follows :—Tungabhadra (between Muniabad and Hospet), 38 spans of 60 feet; Hagari (between Bellary and Hagari), 34 spans of 64 feet (2,396 feet); Kistna (between Kudchi and Shedbal), 14 spans of 150 feet (2,339·50 feet); Ghatprabha (between Dhupdhal and Gokak Road), 45 spans of 40 feet; Malprabha (between Alur and Badami), 12 spans of 100 feet; Kistna (between Sitimani and Alimati), 21 spans of 150 feet (2,392 feet); Bhima (between Lachyan and Tadval), 14 spans of 150 feet (2,342 feet); Wardha (between Hattimattur and Karajgi), 15 spans of 60 feet; Tungabhadra (between Chalgeri and Harihar), 16 spans of 60 feet; Pennar (between Khadarpett and Kalluru), 11 spans of 150 feet (1,740 feet); Rapthad (between Anantapur and Kandukur), 14 spans of 64 feet; Cauvery (between French Rocks and Seringapatam), 9 spans of 30 feet, and 24 spans of 27½ feet; Cauvery (between Seringapatam and Pascham-vahini), 13 spans of 30 feet, and 16 spans of 27½ feet and Dhorabvi viaduct (between Chelama and Diguvametta), 1 span of 250 feet, 2 spans of 150 feet and 1 span of 66½ feet (670 feet).	
(*e*) *Fencing.*—The system is only partially fenced, except the Hindupur railway, which is fenced throughout.	
	West of India Portuguese railway.—The line is partially wire fenced.
(*f*) *Curves.*—The sharpest curves vary from 600 feet to 955 feet radius.	
	West of India Portuguese railway.—The sharpest curve is of a radius of 720 feet.
(*g*) *Gradients.*—Of a total open mileage of 1,643·21 miles on the system 15·40 miles are on the ruling gradient of 1 in 40.	

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History of railways.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
26	(*a*)	**TARAKESHWAR-MAGRA LIGHT.—** (*2′ 6″ gauge*).				
		Tarakeshwar to Basua	18-12-91	7-11-94	12·50	
		Basua to Magra		8-3-95	18·62	
		TOTAL, TARAKESHWAR-MAGRA . . .	...	...	...	31·12
1	(*d*)	**TARKESSUR—** (*See* East Indian system, page 322.)				

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Tarakeshwar-Magra Light railway— (*a*) The Tarakeshwar-Magra Light railway is maintained and worked on the terms in Bengal Government, Public Works Department, Notification No. 1 of the 4th January 1896 under the following agreement :— *Agreement of*—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company). (*b*) The general conditions are as follows :— (i) *Currency of contract.*—In the event of the District Board wishing to purchase the railway at the end of 21 years, under the provisions of section 41 of the Bengal Tramways Act, 1883, the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay. (ii) *Terms of working.*—The line is worked by the owning Company. (iii) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates. (iv) *General remarks.*—On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. **2. Details of construction—** (*a*) *Permanent-way.*—The permanent-way consists of flat-bottomed steel rails, weighing 30lb. to the yard, laid on patent steel sleepers for 10 miles and pyinkado wood sleepers for the remainder. (*b*) *Ballast.*—The line is laid with sand ballast and brick boxing. (*c*) *Fencing.*—The line is partially fenced. (*d*) *Curves.*—The sharpest curve is of 955 feet radius and is 0·18 mile in length. (*e*) *Gradients.*—Of a total open mileage of 31·12 miles, 0·49 mile is on the ruling gradient of 1 in 350.

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Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No. Main.	Class: No. Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
28	(*a*)	**TEZPUR-BALIPARA LIGHT—**				
		(*2′ 6″ gauge*).				
		Tezpur ghat to Bindukuri	Oct. 1894	9-8-94	8·10	
	c	Bindukuri to Balipara		1-9-95	12·00	
		TOTAL, TEZPUR-BALIPARA .	...	...	...	20·10

DIX 47—*continued.*

on the 31st December 1902, alphabetically arranged.

	Remarks.
1. Tezpur-Balipara Light railway.—	
(*a*) The Tezpur-Balipara Light railway is maintained and worked under—	
Terms—contained in notification issued by the Chief Commissioner of Assam under No. 33 of 1st June 1895.	
(*b*) The general conditions are as follows:—	
(i) *Government aid.*—Land alone was provided free of cost.	
(ii) *Currency of terms.*—The Secretary of State can, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract, and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice, and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.	
(iii) *Terms of working.*—The line is worked by the owning Company.	
(iv) *Rates and fares.*—Certain rates and fares have been fixed.	
(v) *General remarks.*—On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.	
2. Details of construction.—	
(*a*) *Permanent-way.*—The permanent-way consists of flat-bottomed steel rails, weighing 30lb. to the yard, laid on uriam and nahor sleepers, 2,200 to the mile.	
(*b*) *Ballast.*—The line is unballasted.	
(*c*) *Fencing.*—The line is fenced round stations only.	
(*d*) *Curves.*—There are two curves of a radius of 500 feet on the first mile, the lengths of which are 294 feet and 450 feet, respectively. In station yards the minimum radius is 300 feet.	
(*e*) *Gradients.*—Of a total open mileage of 20·10 miles, 0·66 mile is on the ruling gradient of 1 in 100.	

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History of railways.

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History of railways constructed and in progress

Class : No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
					Miles.	Miles.
33	(*a*)	**THATON-DUYINZAIK LIGHT—** (*2' 6" gauge.*)				
		Thaton to Duyinzaik	1883	11-2-85	7·76	
		TOTAL, THATÔN-DUYINZAIK .	...	...	...	7·76
22	(*c*) & (*f*)	**TINNEVELLY-QUILON (TRAVANCORE BRANCH.)** (British and Native State sections)— (*See* South Indian system, pages 386 and 388.)				
16	(*b*)	**TIRHOOT—** (*See* Bengal and North-Western system, page 260.)				
10	(*h*)	**TIRUPATTUR-KRISHNAGIRI—** (*See* Madras system, page 350.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Thaton-Duyinzaik Light railway— (*a*) The Thaton-Duyinzaik Light railway is worked under the following contract:— *Contract of*—10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working. (*b*) The general conditions of the contract are as follows:— (i) *Government aid.*—Land has been provided at a pepper-corn rent. Under an Agreement, dated 6th June 1896, the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmein and Thaton *vid* Duyinzaik, including both steamer and railway journeys. (ii) *Currency of contract.*—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway, upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract, if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement. (iii) *Terms of working.*—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900. (iv) *Rates and fares.*—Certain maxima have been fixed within which the proprietors are permitted to vary the rates. **2. Details of construction.—** (*a*) *Permanent-way.*—The rails are steel, Vignole's section, and weigh 20lb. to the yard; the sleepers are of steel and wood. (*b*) *Ballast.*—The line is ballasted. (*c*) *Fencing.*—The line is unfenced. (*d*) *Curves.*—The total length of curves under a radius of 1,000 feet is 1,343 feet, the radii varying from 207 feet to 500 feet. (*e*) *Gradients.*—Of a total open mileage of 7·76 miles, 0·82 mile is on the ruling gradient of 1 in 80.

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History of railways.

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History of railways constructed and in progress

Class: No. Main.	Sub.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
19	(*a*)	**UDAIPUR-CHITOR—** (*3′ 3⅜″ gauge.*)			Miles.	Miles.
		Berach near Chitorgarh to Debari near Udaipur .	Feby. 1894	1-8-95	60·39	
		Separate station at Chitorgarh	2-6-98	15-8-98	0·47	
		Debari to Udaipur		25-8-99	6·44	
		TOTAL, UDAIPUR-CHITOR .	...	...	...	67·30
8	(*f*)	**VIJAPUR-KALOL-KADI—** (*See* Bombay, Baroda and Central India system, page 288.)				
21	(*h*)	**WEST OF INDIA PORTUGUESE—** (*See* Southern Mahratta system, page 396.)				

DIX 47—*concluded.*

on the 31st December 1902, alphabetically arranged.

REMARKS.
1. Udaipur-Chitor railway— The line is owned and has been worked by the Udaipur State, since the 31st December 1897, prior to which date it was worked by the Bombay, Baroda and Central India railway as a temporary measure.
2. Details of construction— (*a*) *Permanent-way.*—The permanent-way consists of 41¼lb. flat-footed steel rails, 30 feet long, laid on deodar sleepers. (*b*) *Ballast.*—The ballast consists of broken stone. (*c*) *Fencing.*—The line is fenced round stations only. (*d*) *Curves.*—On the Berach-Debari section, the sharpest curve is of 1,146 feet radius and is 0·54 mile in length; and on the extension from Debari to the Ahr river near Udaipur, at the 61st mile, the sharpest curve has a radius of 820 feet and is 0·16 mile in length. (*e*) *Gradients.*—Of a total length of 67·30 miles, 0·46 mile are on the ruling gradient of 1 in 100.

Appendix 48.

APPEN

Cost of bridges.

Cost and particulars of some of the large railway bridges in India up to the 31st December

(Referred to in para

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
(5′ 6″ GAUGE.)					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
EAST INDIAN.	1	Soane	22nd Dec. 1862	28	150·00	4,726·00	32	35·60	3,702·00	...
	2	Jumna (Allahabad)	15th Aug. 1865	16	14 of 200·00 2 of 30·00	3,150·00	42	58·75	4,300·00	29,86,000
	3	Jumna (Delhi)	1st Jan. 1867	12 2	211·50 30·00	2,697·00	7 to 39	24·00	3,491·00	5,28,475
	4	Jubilee (over the Hooghly, between Hooghly station on the E. I. R. and Naihati on the E. B. S. R.)	15th Mar. 1887	2 1	523·67 106·50	1,213·25	98·50	55·00	3,460·15	(*f*)10,71,653
		Do. Approach viaducts: Naihati		29	10·83	441·00	...	...	...	...
		Do. Approach viaducts: Hooghly		35 74 1 1 1	10·83 29·17 25·83 43·00 48·00	3,278·00	...	...	...	...
	5	Barakar	4th Sept. 1893	1 5 6 5	200·00 150·00 100·00 (*h*) 29·25	(*i*)1,850·00	(*j*)5 to 85(*k*)	(*l*)	1,307·00	4,13,002
	6	Sone (Dehri) †	22nd Feb. 1900	93	100·00	10,052·00	38·00	26·50	6,510·00	14,28,857
	7	Tonse	4th April 1864	7 2	130·00 32·00	1,194·00	27·75	59·67	1,207·00	8,74,865
BENGAL-NAGPUR.	8	Kanhan	1st Sept. 1887	6 2	170·00 60·00	1,237·00	9 to 26	50·00	1,061·10	3,81,109
	9	Weinganga	29th April 1889	9	150·00	1,450·00	21	54·00	1,234·47	(*o*) 7,38,652
	10	Sheonath No. II	31st May 1889	14	150·00	2,250·00	6 to 12	57·00	1,912·40	4,92,353
	11	Eeb	1st Aug. 1890	9	150·00	1,461·00	42 to 55	38·00	1,229·40	2,63,515
	12	Damoodar	12th June 1890	10 2	200·00 100·00	2,364·00	4 to 75	40·75	2,330·00	3,62,448
	13	Subanrika	6th Mar. 1899	11 2	150·00 60·00	1,968·00	65·00	30·00	1,553·00	5,30,016
	14	Byturney	15th Oct. 1899	15	150·00	2,400·00	73·01	27·73	2,173·00	4,97,249
	15	Brahmini	15th Oct. 1899	29	150·00	4,640·00	78·06	31·83	4,162·00	10,36,691
	16	Berupa	15th Oct. 1899	16	100·00	1,728·00	45·18	32·96	1,172·80	3,42,919
	17	Mahanadi	11th Mar. 1900	64	100·00	6,912·00	68·80	28·54	4,691·20	15,17,466
	18	Kuakhai	2nd April 1900	19	150·00	3,212·00	80·73	36·32	2,870·00	7,70,037
	19	Kathjori	2nd April 1900	18	150·00	2,890·00	80·81	40·32	2,583·00	7,39,340
	20	Roopnarain	19th April 1900	7 4	300·00 100·00	2,632·00	88·00	39·75	4,163·00	26,45,904
	21	Cossye	...	16	100·00	...	...	...	...	...
INDIAN MIDLAND.	22	Chumbal	15th May 1891	12 2	186·00 136·00	2,714·00	75	107·20	3,026·00	17,39,057
	23	Jumna (Kalpi)	1st Feb. 1888	10	250·00	2,626·00	90	77·00	3,280·00	12,65,842
	24	Betwa (Manikpur)	5th June 1889	13 1	150·00 60·00	2,166·00	13	91·04	1,772·30	8,19,541
	25	Ken (Banda)	1st Aug. 1889	12 1	100·00 250·00	1,558·00	4	70·82	1,125·30	3,92,243
	26	Betwa (Lalitpur)	1st Jan. 1889	9	150·00	1,446·00	12	58·14	1,200·86	4,02,749
BHOPAL-ITARSI.	27	Nerbudda	18th Nov. 1884	14 1	150·00 60·00	2,306·00	4	64·50	1,980·00	3,45,696

DIX 48.

Appendix 48.
Cost of bridges.

1902, of 1,000 feet length and over and costing not less than Rs. 6,00,000 each.

graph 49 of Report).

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
Rs.	Rs.	Rs.	Rs.	Rs.		
(a) 10,33,324	...	(b) 43,33,324	917	79	1	Has the rails above and the roadway below. The roadway was subsequently doubled. (a) Represents the cost of the second line only. (b) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed, as well as the cost of iron work for the first line
(c) 14,63,300	...	(d) 44,46,300	1,412	110	2	The substructure of this bridge is for a double line, but the girders are erected for a single line only. It has the rails above and the roadway below. (c) Of this amount Rs. 13,13,000 represents the cost of girders, and Rs. 1,47,300 the cost of upper and lower roadways. (d) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed.
10,49,779	...	(e) 16,60,335	616	74	3	The girders of this bridge are erected for a double line. It has the rails above and the roadway below. (e) Represents the total expenditure on the bridge debited to Capital and includes some special items not separately detailed.
21,78,852	1,21,184	33,71,689	2,679	(g) 350		(f) Including charges on account of plant, Rs. 3,81,544, and supervision Rs. 3,19,456. (g) Estimated.
...	...	64,611	147	...	4	The approach viaducts are brick arches.
...	...	4,80,263	147	...		
3,79,078	(m) 13,726	8,05,806	428	58	5	(h) In viaducts. (i) From front to front of abutments. (j) On rock. (k) In sand. (l) Deck bridge various; 75 feet to rails.
16,85,480	1,18,393	*32,32,730	310	30	6	(m) Stone round piers only. No training works.
4,54,473	...	(n) 14,08,401	1,180	138	7	†The superstructure of this bridge is for a double line, but the girders are erected for a single line only, hanging decked with corrugated steel floor plates. Hand rails on both sides, and a foot way below between girders for inspection. Rails above. * Approximate.
2,78,632	13,174	6,72,915	533	Not known	8	(n) Including Rs. 79,063 on account of cost of flooring.
(p) 2,42,833	(q) 22,248	10,03,733	677	43	9	Has been converted from 3′ 3⅜″ to 5′ 6″ gauge. The expenditure shown represents the cost of the bridge as a 5′ 6″ gauge one. The 3′ 3⅜″ gauge was opened on the 7th June 1882 and 5′ 6″ gauge on the 29th April 1889.
3,91,240	...	8,83,593	393	87	10	(o) Including the cost of the old 3′ 3⅜″ gauge bridge (Rs. 6,74,612). (p) Actual cost of girders only. The cost of the 3′ 3⅜″ gauge girders removed, which is not included in these figures, was Rs. 2,40,303. (q) Cost of protective works as it was on the 3′ 3⅜″ gauge bridge.
3,42,958	23,856	6,30,329	415	...	11	
6,36,230	40,328	10,39,006	422	65	12	
4,16,274	37,033	9,30,048	468	69	13	
4,94,615	29,299	10,26,174	415	33	14	
9,55,213	1,13,651	21,41,731	437	34	15	
2,78,777	26,602	6,74,882	375	40	16	These figures are not final.
11,69,130	88,282	27,91,784	391	35	17	
7,14,971	37,714	15,27,183	464	36	18	
6,39,649	35,741	14,10,446	476	35	19	
11,60,261	...	39,37,438	1,496	279	20	
...	...	6,57,102	...	...	21	
9,02,295	6,29,683	32,71,035	973	78	22	
11,41,231	1,59,564	25,66,637	917	107	23	The abutments and piers are built for a double line, but the girders are erected for a single line only, with a roadway on the same level, which has been brought into use from the 1st May 1895.
5,74,179	...	13,93,720	643	85	24	
3,39,954	...	7,32,197	471	84	25	
3,59,308	2,615	7,64,672	527	64	26	The abutments are built for a double line.
5,77,925	...	(r) 9,44,171	422	85	27	(r) Including some special items not separately detailed.

Appendix 48.
Cost of bridges.

Cost and particulars of some of the large railway bridges in India up to the 31st December

Referred to in para

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
North Western State.	28	Sutlej (Ludhiana)	January 1870	(a) 47	4 of 71·00 41 of 99·00 1 of 99·67 1 of 96·67	5,131·00	28 to 42	20·79	(b) 2,314·00	20,99,296
	29	Beas	April 1869	34	2 of 120·00 32 of 100·00	3,828·00	43 to 70	20·00	1,660·00	15,66,476
	30	Jumna (Saharanpur)	January 1869	24	22 of 99·00 2 of 100·00	2,674·75	39 to 41	19·00	1,308·00	7,64,420
	31	Kaisar-i-Hind (over the Sutlej at Ferozepore)	8th May 1887	27	144·50	4,293·00	78	21·00	6,000·00	14,48,037
	32	Ravi as originally constructed	12th April 1875	33	90·00	3,217·00	75	20·00	1,419·00	9,50,202
		Ravi as reconstructed	15th July 1893	15	90·00	1,465·00	75	19·00	(i) 1,381·00	...
	33	Alexandra (over the Chenab between Wazirabad and Kathala) as originally constructed	22nd Jan. 1876	64	133·50	9,088·00	75	20·00	5,248·00	24,03,756
		Alexandra as reconstructed	1st Nov. 1891	28	133·50	3,976·00	75	20·00	5,073·40	22,920
	34	Jhelum as originally constructed	Towards end of 1876.	50	90·00	4,874·00	30	20·75	2,150·00	6,90,137
		Jhelum as reconstructed	20th Nov. 1895	50 1 land span.	90·00 18·50	4,899·42	30	22·63	2,475·00	1,79,770
	35	Attock	24th May 1883	5	2 of 296·25 3 of 246·25	1,522·00	(k)	111·00	2,202·00	14,77,580
				2 land spans.	40·00					
	36	Empress (over the Sutlej at Adamwahan)	8th June 1878	16	250·00	4,210·00	100	32·07	6,704·00	26,98,885
	37	Victoria (over the Jhelum at Chak Nizam)	16th May 1887	17	135·00	2,720·00	82	19·00	2,988·00	7,73,481
	38	Lansdowne over the Indus at Sukkur—								
		Rohri Channel	27th Mar. 1889	1	790·00	900·00	None in river	51·00	3,292·00	2,88,320
		Sukkur Channel		1 1 1	270·00 230·00 90·00	620·00	6	46·00	1,014·00	1,79,468
	39	Sher Shah (over the Chenab at Sher Shah)	1st Feb. 1890	17	200·00	3,650·00	75	29·00	3,740·00	10,84,453
	40	Indus (Kotri)	25th May 1900	1 5	100·00 350·00	1,948·00	49 to 60	40·00	4,761·00	6,93,691
	41	Sohan	1st April 1899	1 4 2	119·00 200·00 100·00	1,204·50	(o)	96·00	1,150·00	5,91,487
Oudh and Rohilkhand State.	42	Gumti (Jaunpur)	24th Dec. 1874	16	82·00	1,472·00	45 to 50	44·17	811·00	4,21,530
	43	Ramganga (Bareilly)	24th June 1874	1 31	55·00 56·00	2,277·00	85	25·77	903·85	4,50,625
	44	Ganges (Rajghat, Aligarh branch)	5th June 1874	1 1 33	72·00 58·00 80·00	3,040·00	55	24·39	1,050·00	3,78,991
	45	Ganges (Cawnpore)	15th July 1875	23 2 2	100·00 96·00 40·00	2,850·00	50 to 65	31·66	1,815·00	7,11,073
	46	Ganges (Balawali)	9th May 1887	11	249·50	7,886·00	100	37·94	3,944·00	10,16,438
	47	Solani	1st Jan. 1886	11	149·58	1,749·50	60	16·75	1,563·00	4,03,182
	48	Dufferin (over the Ganges at Benares)	1st Oct. 1887	7 9	331·00 103·00	3,507·41	25 to 141	75·32	6,780·00	13,04,407
	49	Ramganga (Moradabad)	8th June 1894	10	200·00	2,126·00	75 to 83	21·50	2,662·76	3,26,267
	...	Ganges (Gurmukhtesar)	11th April 1901	11	200·00	2,332·00	81	28·00	2,574·00	5,21,135
Eastern Bengal State.	50	Gorai	1st Jan. 1871	7 9 2	174·71 43·69 18·00	1,759·00	75 to 95	53·17	1,645·00	...
	51	Teesta	1st April 1901	13	150·00	2,116·40	22 22 60	49·58 27·27	154·00 1,704·30	3,56,322
	52	Dharla	2nd Jan. 1902	10	150·00	1,620·00	75 to 77	26·22	1,290·00	3,70,962
	53	Sankosh	23rd Sept. 1902	9	150·00	1,458·00	85	33·08	1,165·59	3,85,760

DIX 48—*continued.*

1902, of 1,000 feet length and over and costing not less than Rs. 6,00,000 each—contd.

graph 49 of Report).

Total cost of girders.	Cost of protective works.	Total cost including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	Remarks.
Rs.	Rs.	Rs.	Rs.	Rs.		
(*c*) 10,08,780	(*d*) 2,54,000	33,60,076	(*e*) 605	(*g*)	28	(*a*) Twelve spans have been removed. (*b*) Does not include weight of girders removed. (*c*) Does not include cost of girders removed. (*d*) Including cost to 1874, since which date a large amount of additional expenditure has been incurred. (*e*) Calculated as for the present length. (*f*) The contract rate for the construction of these three bridges, including protective works, was Rs. 428 per foot run of the bridges, and the figures as to cost are approximate only.
7,23,690	3,00,000	(*f*) 25,90,166	598	(*g*)	29	(*g*) Contract included erection.
5,70,180	2,00,000	15,34,600	499	(*g*)	30	
15,52,329	11,07,900	41,08,266	699	50	31	Carries the rails below and the roadway above.
5,01,641	1,50,472	16,02,315	451	(*h*) 125	32	(*h*) Originally carried the rails above and a footpath below. This has now been changed.
1,94,098	96,386	2,90,484	132	(*j*) 40		(*i*) Including the road bridge (634 tons). (*j*) The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms as corrugated flooring 16 feet wide and a metalled roadway 13′ 8″ clear between guard rails.
19,94,271	9,40,336	53,38,363	484	121	33	The bridge has been reduced from 64 to 28 spans. The girders doubled, and new cross and rail girders put in. The track is carried between the girders and there are foot-paths on cantilevers outside.
2,45,769	49,381	3,18,070	68	27		The cost of reconstruction only is shown against this entry. The bridge was not closed for traffic during reconstruction; all restrictions were removed on the 1st November 1891, and the bridge was thrown open for traffic as usual.
9,40,487	81,248	17,11,872	335	124	34	Originally carried the rails above and a foot-path below. This has now been changed.
8,33,242	86,664	10,99,676	207	37		The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms a corrugated flooring 16 feet wide and a metalled roadway 14′ 6″ between guard timbers.
15,96,980	1,45,956	32,20,016	2,020	437 252	35	Has the rails above and a military roadway below. (*k*) Pier No. 1.—All standards and struts founded at same level, *viz.*, 343·68 or 21·68 feet *above* low-water level. Pier No. 2.—All standards and struts founded at same level, *viz.*, 319·12 or 2·88 feet *below* low-water level. Pier No. 3.—Up-stream strut on east side of pier was founded at 311·88 or 10·12 feet *below* low-water level; all other standards and struts founded at same level, *viz.*, 313·30 or 8·70 feet *below* low water level. Pier No. 4.—Two main standards and one down-stream strut, all on west side of pier, were founded at 337·29 or 15·29 feet above low-water level; all other standards and struts founded at same level-*viz.*, 343·29 or 21·29 feet *above* low-water level.
23,96,558	(*l*) 20,06,246	71,01,689	1,210	105	36	Has a combined road and railway on the same level.
8,02,104	3,73,226	19,48,811	(*m*) 579	(*m*) 66	37	(*l*) Including Rs. 1,98,055, cost of materials for temporary bridge.
24,96,074	4,946	27,89,340	3,094	185	38	Has a combined road and railway on the same level and a footway on each side, supported on wrought iron brackets, and provided with hand rails.
3,77,912	...	5,57,380	899	110		(*m*) Calculated on cost, which includes Rs. 18,000 on account of cost of staging.
10,83,528	6,66,120	28,34,101	594	56	39	Has a roadway on the same level as the rails, and a footway on each side, the roadway being formed of steel corrugated troughs fitted with teak scantlings.
16,06,334	...	23,00,025	1,181	(*n*) 107	40	Has a roadway on the same level as the rails, 15′ wide between girders and 14′ 6″ headway at centre from rail-level to bottom of cross girders of top boom. The roadway consists of corrugated steel troughs fitted with deodar battens. (*n*) Including staging erection, painting and share of service works, contingencies, plant and general charges.
3,32,098	3,547	9,27,132	767	65	41	(*o*) Pier No. 2 . . . . . 10′ below low-water. ,, ,, 3 . . . . . 43′ ,, ,, ,, ,, 4 . . . . . 48′ ,, ,, ,, ,, 5 . . . . . 53′ ,, ,, ,, ,, 6 . . . . . 20′ ,, ,, ,, ,, 1, 7 and 8 . . . above low-water.
3,24,622	8,526	7,54,678	507	109	42	
1,90,000	9,25,508	15,66,133	281	63	43	
3,10,388	1,32,724	8,22,103	227	28	44	
8,75,745	1,74,160	17,60,978	557	(*p*)	45	Has the rails above and the roadway below. (*p*) Included in the cost of girders.
10,86,000	6,73,430	27,75,868	728	62	46	
3,99,277	2,20,091	10,22,550	458	10	47	
32,55,035	1,45,329	47,04,771	929	47	48	Has a roadway on the same level as the rails, and a footway on each side, supported on cantilevers outside the girders.
6,88,391	1,21,837	11,36,495	477	42	49	Has a roadway on the same level as the rails.
7,78,519	5,67,542	18,67,196	604	51	...	The permanent way is laid on cross sleepers laid on trough foot plates, which are filled in with rammed kunkur and are used as a military road for guns, etc.
...	...	(*q*) 14,83,750	830	...	50	(*q*) Including Rs. 22,618 charged to revenue, and Rs. 879 charged to capital, for the protection of piers. The cost is approximate.
4,20,941	6,56,778	14,34,041	367	53	51	
3,81,096	4,71,918	12,23,976	464	53	52	
3,21,993	3,84,871	10,92,624	485	59	53	

Appendix 48.
Cost of bridges.

Cost and particulars of some of the large railway bridges in India up to 31st December

(Referred to in para.

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
Great Indian Peninsula.	54	Kistna	9th Oct. 1873	36	100·00	3,855·09	(a) 9	48·67	2,556·00	(b) 6,11,163
	55	Tapti	12th Aug. 1872	5	138·00	2,556·00	15·96	60·33	2,392·00	(c) 7,72,163
				28	59·00					
	56	Nerbudda	8th Mar. 1870	5	137·00	1,052·00	4·60	81·33	525·00	4,06,032
				6	40·00					
	57	Girna	10th May 1901	9	166·16	1,572·00	48·00	57·00	1,653·00	4,52,221
	58	Girna	15th Oct. 1900	13	100·00	1,417·00	7·00	39·00	1,040·00	1,72,929
Bombay, Baroda and Central India.	59	Nerbudda (Old)	23rd June 1861	25	183·50	4,687·50	76	48·50	4,650·00	23,21,000
		Nerbudda (New)	16th May 1881							
	60	Tapti	19th Nov. 1860	30	60·00	1,875·00	20	50·50	1,950·00	...
Madras.	61	Cheyer (Old)	1st Sept. 1865	50	64·00	3,500·00	100	14·00	988·00	9,10,934
		Cheyer (New)	1st May 1880							
	62	Tungabhadra	16th Jan. 1871	36	64·00 girders.	4,060·00	14	34·00	1,213·00	6,83,088
				44	29·00 arches.					
	63	Penner (Old)	May 1869	13	131·00	1,830·00	33 to 54·33	22·00	1,999·00	...
		Penner (New)	1st Oct. 1889							
	64	Chitravati (Old)	1st Sept. 1868	19	134·00	2,670·00	18 to 78	18·00	2,938·00	...
		Chitravati (New)	6th Mar. 1890							
	65	Papaghni (Old)	Aug. 1866	20	64·00	1,410·00	...	...	...	...
		Papaghni (New)	1st July 1892	15	131·00	2,110·00	52·50 to 62·00	15·00	2,391·00	5,93,030
Madras (North-East Line).	66	Kistna	17th Mar. 1893 for coal traffic, and 1st Jan. 1894 for metre gauge traffic.	12	292·00	3,736·00 outside and 3,684·00 inside abutments.	82	46·59	6,426·00	16,43,547
	67	Rushu Kulya	1st Sept. 1895	10	150·00	1,598·00	70	23·00	1,437·25	3,33,096
	68	Penner	20th Dec. 1898	23	70·00	1,990·00	8·59 to 40·40	39·58 to 42·17	911·75	3,97,961
				5	40·00					
	69	Godavari	6th Aug. 1900	56	150·00	9,000·00 between abutments 9,096 over all.	48 to 100	3,475·09	7,668·00	...
				1	40·00					
South Behar (Luckeeserai-Gya). (5′ 3⅜″ gauge.)	70	Phulgar	3rd July 1899	18	100·00	2,664·00	45·00	18·00	1,520·00	5,74,661
				1	30·00					
Bengal and North-Western, Tirhoot section.	71	Gandak	25th April 1887	8	250·00	2,176·00	40 to 90	40·46	2,495·00	6,07,133
	72	Kosi	26th June 1902	15	200·00	3,172·60	95	42·72	3,060·00	15,27,676
Company's section.	73	Ranti	15th June 1886	9	150·00	1,445·00	86	41·00	1,145·70	4,93,956
	74	Elgin	24th Dec. 1898	17	200·00	3,695·00 including abutments.	94 to bottom of well curbs.	28·50	4,199·00	6,80,222
Rajputana-Malwa.	75	Jumna (Agra)	1st Jan. 1876	16	133·00	2,472·00	70	31·66	2,551·40	3,92,886
				6	23·00					
	76	Nerbudda	14th June 1877	14	183·00	(p) 2,836·00	14	80·00	2,362·00	9,39,407
	77	Jumna (Muttra)	15th Dec. 1884	7	150·00	1,146·00	71	27·00	1,309·00	3,06,341
Southern Mahratta.	78	Bhima	1st Aug. 1884	14	150·00	2,342·00	18·50	58·77	1,680·00	3,33,256
	79	Kistna (Bijapur branch)	1st Aug. 1884	21	150·00	3,392·00	13·00	43·17	2,498·00	3,43,345
	80	Kistna (Poona Branch)	2nd Feb. 1888	14	150·00	2,339·50	4·17	75·79	1,897·12	2,65,228
	81	Hagari	4th Oct. 1877	34	64·00	2,396·00	68·25	16·30	660·90	6,42,732
	82	Dorabavi viaduct	15th June 1890	1	250·00	670·00	...	(s) 29·00 to 179·63	5,60·00	3,33,934
				2	150·00					
				1	66·50					
				7	60·00					
Burma	83	Gokteik viaduct	1st June 1901	10	120·00	2,260·00	...	300·00	4,241·00	2,33,213
				16	40·00					
Guntakal-Mysore Frontier.	84	Penner	1st June 1892	11	150·00	1,740·00	21·00 to 55·00	18·71	1,077·00	2,89,774
Assam-Bengal.	85	Barak	23rd April 1899	8	60·00	1,368·00	(u)	70·21	1,107·00	4,72,410
				1	276·00					
				1	250·00					
				1	224·00					

1902, of 1,000 feet length and over, and costing not less than Rs. 6,00,000 each—concld.

graph 49 of Report.)

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
Rs. 6,61,903	Rs. ...	Rs. 12,73,066	Rs. 330	Rs. 30	54	The girders are for a single line, and the piers for a double line. (*a*) Nine piers and two abutments are founded above low-water level. (*b*) Including Rs. 25,656, being the cost of other items not separately detailed.
7,90,175	64,910	16,27,248	611	71	55	Carries a double line. (*c*) Including Rs. 95,918, being the cost of other items not separately detailed.
2,63,064	...	6,69,096	636	235	56	The girders are for a single line, and the piers for a double line.
4,62,308	...	9,14,529	582	32	57	Braced N type girders over corrugated iron cylinder piers and a masonry abutment for single line.
2,61,357	...	4,34,286	306	26	58	Braced N type girders over masonsy piers and abutments for single line.
12,58,929	(*d*) 5,61,188	(*e*) 41,41,117	764	49	59	The figures as to cost refer to the new bridge only; the cost of the old bridge is not known. (*d*) Including some special items not separately detailed. (*e*) Excluding cost of the approaches.
...	...	(*f*) 12,13,541	647	...	60	(*f*) Including Rs. 5,948 being the cost of raising rail-level on up and down lines and Rs. 3,05,511 on account of the renewal of Warren girders with 60 feet plate girders.
1,95,689	...	(*g*) 12,45,464	356	...	61	(*g*) Including some special items not separately detailed, but excluding the cost of the old bridge, Rs. 4,06,293.
2,38,970	...	(*h*) 10,54,862	260	54	62	(*h*) Including Rs. 2,99,106 being the expenditure incurred on strengthening the bridge, and some special items relating to original construction not separately detailed.
2,84,610	...	(*i*) 11,32,077	619	...	63	The cost does not include the expenditure incurred on the old bridge, Rs. 1,72,576. (*i*) Includes some special items not separately detailed.
3,85,833	...	(*i*) 13,58,194	509	...	64	The cost does not include the expenditure incurred on the old bridge, Rs. 3,54,705.
...	...	(*j*) 1,62,354	...	...	65	(*j*) Approximate.
3,63,332	38,568	9,94,930	453	(*k*) 12		(*k*) Including superintendence and all charges after girders were unloaded from wagons.
18,74,453	5,14,000	40,32,000	942	34	66	The cost of approaches, Rs. 4,71,000, has not been entered.
3,41,642	41,453	7,16,191	422	57	67	
1,83,931	54,663	6,30,545	316	30	68	
...	...	47,14,849	518	22	69	
3,70,681	15,060	9,60,402*	458	25	70	Has the rails over girders. Pathway below formation, decked with corrugated sheets, girders hanging. * Approximate.
7,29,506	48,244	(*l*) 13,84,883	614	61	71	Has a foot-way on each side, supported on wrought-iron brackets and provided with a hand rail. (*l*) Excluding cost of viaduct, Rs. 1,40,505.
7,33,424	15,18,364	37,79,464	712	64	72	
(*m*) 3,29,522	6,34,665	(*n*) 14,58,143	570	65	73	(*m*) Including cost of erection of girders, Rs. 74,543. (*n*) Including Rs. 28,971, on account of protective works, Rapti bridge, incurred during 1894-95.
11,09,548	6,17,298	24,07,068	484	47	74	Has military blockhouses at either end and a roadway at rail-level which is being adapted to artillery.
6,90,683	48,776	(*o*) 18,33,877	786	85	25	Lattice girders carrying the rails below and the carriage road above. This bridge is built for and carries the standard gauge. (*o*) Including some special items not separately detailed.
4,42,105	777	(*q*) 18,73,925	660	106	76	Triangulated girders—designed to carry the rails above and a carriage road below. (*p*) Including two abutment spans. (*q*) Including some special items not separately detailed.
3,72,000	14,194	(*r*) 8,49,000	728	35	77	Has a combined road and a railway on the same level.
4,71,097	26,419	8,30,772	343	73	78	(*r*) Including some special items not separately detailed.
7,48,444	47,852	11,39,641	322	84	79	
4,79,402	5,474	7,50,104	318	...	80	
1,21,173	...	7,63,905	319	...	81	
3,61,198	405	(*t*) 6,95,537	1,038	100	82	(*s*) The height is from ground to underside of girders. (*t*) Including charges on account of hand-railing.
14,64,997	...	16,98,210	751	...	83	Height 320'.
3,10,941	1,49,430	7,50,145	345	40	84	
4,38,442	21,561	9,21,705	658	133	85	(*u*) South abutment 34'08'. North abutment 35'00'. Pier 1, 72'33'; Pier 2, 82'00'. Land spans above T. W. level 27'54'.

Appendix 49.
Cost of tunnels.

Cost and particulars of some of the important tunnels on the railways in India up to the 31st

(Referred to in para

Railway.	Serial No.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Gauge.	Length.					Total cost, including tools and plant.
						Unlined.	½ lined.	¾ lined.	Completely lined.	Total.	
(5′ 6″ GAUGE.)						Feet.	Feet.	Feet.	Feet.	Feet.	Rs.
East Indian.	1	Monghyr (*a*)	Below Jamalpur	Built for double line, but 2′ too narrow.	5′ 6″	434	...	...	466	900	No record
Bengal-Nagpur.	2	Darekasa	Darekasa	Single	5′ 6″	735	...	...	...	735	1,82,984
	3	Saranda	Goilkera	Single	5′ 6″	388	...	1,253	...	1,641	8,66,964
	4	Bhortonk	Khodri (Katni Branch)	Single	5′ 6″	...	...	...	1,000	1,000	2,09,674
Godra-Ratlam-Nagda.	5	Panchpipla	Bajrangarh	Single	5′ 6″	540	...	...	225	765	(*b*) 2,29,829
North Western State (*Main line*).	6	Sohawa No. 1	Sohawa	Single	5′ 6″	...	...	538½	...	538½	(*c*) 1,67,629
	7	Margalla No. 3	Sarai Kala	Single	5′ 6″	...	450	500	...	950	(*c*) 1,87,150
	8	Attock No. 4	Khairabad	Single	5′ 6″	...	...	677½	...	677½	(*c*) 1,80,924
	9	Attock No. 5	Khairabad	Single	5′ 6″	...	...	722	...	722	(*c*) 1,63,003
	10	Khairabad No. 7	Khairabad	Single	5′ 6″	...	...	401½	...	401½	(*c*) 1,55,540
North Western State (*Sind-Pishin section*).	11	Gundakinduff	Midway between Babar Kachh and Kochali.	Single	5′ 6″	...	...	569½	...	569½	2,08,826
	12	Kochali, Lower	Kochali	Single	5′ 6″	...	...	506	...	506	1,84,061
	13	Karez No. 1	Dirgi	Single	5′ 6″	806	...	...	...	806	3,12,382
	14	Karez No. 2 and Karez	Dirgi	Single	5′ 6″	2,034	...	...	...	2,034	4,41,963
	15	Lower Chapper Arching	Mangi	Single	5′ 6″	...	...	592	...	592	1,62,657
	16	Iron Gates	Mangi	Single	5′ 6″	1,227	...	...	...	1,227	3,12,679
	17	Mudgorge Arching	Mudgorge	Single	5′ 6″	...	...	1,087	...	1,087	4,12,344
North Western State (*Chaman extension*).	18	Khojak No. 18	Shelabagh	Double	5′ 6″	...	...	12,870	...	12,870	(*d*) 68,26,790
	19	No. 20	3¼ miles below Shelabagh.	Double	5′ 6″	...	...	756	...	756	2,24,027
	20	No. 23	6¼ miles below Shelabagh.	Double	5′ 6″	...	...	800	...	800	2,57,294

December 1902, of 500 feet length and over and costing not less than Rs. 1,50,000 each.

graph 49 of Report).

Cost per foot run.	Time taken to drive heading.	Time taken to complete tunnel. From	Time taken to complete tunnel. To	Serial No.	Remarks giving nature of ground passed through, etc.
Rs.					
...	Not known .	March 1856 . (Work suspended)	June 1861 . . during one year)	1	Quartz and slate. (*a*) A foot-path has been laid and fenced off through the tunnel.
249	Not known .	May 1879 . .	6th Nov. 1893 .	2	All hard rock.
528	1·75 years .	January 1888 .	Sept. 1892 .	3	Very hard slaty rock with a great deal of water.
210	1·00 year . .	14th March 1888	6th Dec. 1890 .	4	Gneiss interspersed with veins of quartz. The total cost excludes the cost of plant.
300	0·63 year . .	24th August 1892	7th April 1894 .	5	Northern 500 feet hard basalt; southern 265 feet hard rock, but composed of boulders liable to fall. This part has been lined. (*b*) Including Rs. 17,000 for machinery.
(*c*) 311	0·50 year . .	November 1878 .	15th March 1880	6	Red clay and sandstone. War prices were paid owing to the Afghan war. Common coolies were getting 8 annas per day. The heading was got through in six months, and the work was then left quite in abeyance, pending further orders, till September 1879; otherwise the whole would have been complete within a year.
(*c*) 197	0·54 year . .	4th April 1881 .	15th Aug. 1882 .	7	Nummulitic limestone shaken with clay seams.
(*c*) 267	.....	Not recorded		8	Treacherous shale.
(*c*) 226	.....	Not recorded		9	Treacherous shale.
(*c*) 387	.....	Not recorded		10	Treacherous shale.
	.....	.....	.....		(*c*) The charges do not include tools and establishment, for which an addition of, say, 15 to 20 per cent. should be made to the figures given. Cost of faces is included. Probably charges for timber, etc., have not been exactly distributed; a safe rate for a completely lined tunnel would apparently be about Rs. 230 per foot.
367	.....	1884 . .	1886 . .	11	Sandstone in hard and soft beds.
364	.....	1884 . .	1886 . .	12	Soft sandstone with beds of soft earth.
164	.....	.....	.....	13	Hard limestone. The frequent openings near the roof, as in some karezes, give the tunnel its name.
217	.....	.....	.....	14	Hard limestone.
275	.....	.....	.....	15	Gravel with red clay. This was originally intended to be an open cutting, but, owing to the difficulty of getting it out, it had to be arched over.
255	.....	.....	.....	16	Hard limestone.
379	.....	.....	.....	17	Middle eocene gypsiferous deposits. This was originally intended to be an open cutting, but owing to the constant slips, etc., it was eventually covered in.
530	2·01 years . .	13th April 1889 .	September 1891 .	18	Lining practically completed on the 31st October 1894. Water bearing shales and layers of soft mud. The tunnel has been three-quarters lined throughout. (*d*) The cost of tunnel is Rs. 66,00,518, that of lining, Rs. 2,25,601, and that of capital establishment, Rs. 671.
296	0·34 year . .	December 1888 .	June 1890 . .	19	Hard and soft shales with beds of mud. This is a cut and cover on 902 ft. radius.
322	0·44 year . .	April 1889 . .	November 1890 .	20	Through soft and hard water bearing shales on 819 ft. radius.

Appendix 49.
Cost of tunnels.

Cost and particulars of the important tunnels on the railways in India up to the 31st

(Referred to in para

Railway.	Serial No.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Gauge.	Length.					Total cost, including tools and plant.
						Unlined.	½ lined.	¼ lined.	Completely lined.	Total.	
						Feet.	Feet.	Feet.	Feet.	Feet.	Rs.
North Western State (Mushkaf-Bolan section).	21	No. 2	Mushkaf	Double	5′ 6″	...	...	650	...	650	1,70,662
	22	No. 7	Ocepur	Double	5′ 6″	...	528	211	...	739	2,16,787
	23	Panir No. 9	Panir	Double	5′ 6″	...	523	2,695	...	3,218	12,81,710
	24	Seetal No. 12	Peshi	Double	5′ 6″	...	...	1,035	...	1,035	2,96,510
	25	Cascade No. 14	Dozan	Double	5′ 6″	...	189	353	...	542	1,66,830
North Western State (Mari-Attock section).	26	No. 1	Jalhar	Single	5′ 6″	101	...	...	1,076	1,180	2,49,142
	27	,, 2		Single	5′ 6″	...	...	...	854	854	1,81,423
	28	,, 3		Single	5′ 6″	104	...	...	1,671	1,775	3,41,143
	29	,, 4		Single	5′ 6″	288	...	...	842	1,130	2,01,614
	30	,, 5		Single	5′ 6″	...	...	...	1,614	1,614	2,91,054
	31	,, 6		Single	5′ 6″	...	...	...	1,897	1,897	3,65,807
	32	,, 9	Chhab	Single	5′ 6″	...	...	...	1,300	1,300	2,60,793
Great Indian Peninsula.	33	Thull Ghât No. 2	Kasara	Double	5′ 6″	...	...	1,625	...	1,625	3,90,394
	34	Thull Ghât No. 4	Kasara	Double	5′ 6″	628	...	85	...	713	1,15,170
	35	Thull Ghât No. 7	Igatpuri	Double	5′ 6″	1,461	...	...	...	1,461	1,77,255
	36	Thull Ghât No. 8	Igatpuri	Double	5′ 6″	1,247	...	...	...	1,247	1,52,325
	37	Thull Ghât No. 11	Igatpuri	Double	5′ 6″	727	...	...	...	777	94,605
	38	Bagra	Bagra	Double	5′ 6″	...	...	910	...	910	2,15,747
	39	Bhore Ghât No. 7	Palasdhari	Double	5′ 6″	837	...	...	...	837	1,06,627
	40	Bhore Ghât No. 8	Palasdhari	Double	5′ 6″	858	...	...	...	858	1,13,907
	41	Bhore Ghât No. 9	Thakurvadi	Double	5′ 6″	825	...	...	...	825	1,08,677
	42	Bhore Ghât No. 13	Thakurvadi	Double	5′ 6″	1,305	...	...	...	1,305	1,73,649
	43	Bhore Ghât No. 22	Reversing station	Double	5′ 6″	828	...	...	...	828	1,12,982
	44	Bhore Ghât No. 23	Reversing station	Double	5′ 6″	405	...	363	...	768	2,09,783
	45	Bhore Ghât No. 24	Reversing station	Double	5′ 6″	975	...	48	...	1,023	1,50,352
(3′ 3⅜″ gauge.)											
Rajputana-Malwa.	46	Mhow Ghâts No. 1	Patal Pani to Kalakhund.	Single	3′ 3⅜″	...	...	279¼	...	279¼	53,815
	47	Mhow Ghâts No. 2				305½	...	60¼	...	365½	42,120
	48	Mhow Ghâts No. 3				...	...	344⅝	...	344⅝	1,94,925
	49	Mhow Ghâts No. 4				...	...	622¾	...	622¾	1,25,190
Southern Mahratta.	50	Bear's Rock	Castle Rock	Double	3′ 3⅜″	...	...	...	471	471	3,63,606
	51	Castle Rock	Castle Rock	Double	3′ 3⅜″	...	...	...	1,242	1,242	9,08,615
	52	No. 2	Alandi	Single	3′ 3⅜″	630	...	...	...	630	1,53,963
	53	Nandicanama	Chelyama	Single	3′ 3⅜″	...	...	...	1,527	1,527	4,41,418
West of India Portuguese.	54	No. 1	About 3¼ miles below Dudhsagar.	Double	3′ 3⅜″	422½	...	81½	...	504	1,75,629
	55	No. 5	Dudhsagar	Double	3′ 3⅜″	561	39	65	...	665	1,81,872
	56	No. 10	About 2½ miles above Dudhsagar.	Double	3′ 3⅜″	772	70	...	...	842	1,54,512
Assam-Bengal.	57	No. 1 (Division 8, Section II).	Between Bihara and Damchara.	Single	3′ 3⅜″	...	...	...	671	671	3,61,414
	58	No. 2 Durgacherra (Division 8, Section II).	Damchara	Single	3′ 3⅜″	...	...	...	427	427	3,34,462
	59	No. 3 (Division 8, Section II).	Between Damchara and Harangajao.	Single	3′ 3⅜″	...	...	...	457	457	2,19,861

DIX 49—*concluded.*

December 1902, of 500 feet length and over and costing not less than Rs. 1,50,000 each—concld.

graph 49 of Report.)

Cost per foot run.	Time taken to drive heading.	Time taken to complete tunnel. From	Time taken to complete tunnel. To	Serial No.	Remarks giving nature of ground passed through, etc.
Rs.					
263	0·25 year	October 1893	June 1895	21	Through clay and sandstone bands on the straight.
293	0·25 year	November 1893	March 1895	22	Through conglomerate: 354 feet on 4° curve and the rest straight.
398	0·81 year	November 1892	May 1895	23	Through nummulitic limestone of varying degrees of hardness on the straight.
286	0·63 year	March 1893	September 1895	24	Through clay and conglomerate bands, 1,000 feet straight and the rest on 3° curve.
308	0·37 year	August 1892	November 1894	25	Through hard limestone on the straight.
211	2 years	1891	1897	26	Lime and sandstone, also shale.
212	2 years	1891	1896	27	Lime and sandstone, also shale.
192	2 years	1891	1897	28	Lime and sandstone, also shale.
178	2 years	1891	1896	29	Lime and sandstone, also shale.
180	2 years	1891	1897	30	Lime and sandstone, also shale.
193	2 years	1891	1897	31	Lime and sandstone, also shale.
201	2 years	1896	1898	32	Sandstone, red clay and shale.
240	4·75 years	February 1858	March 1864	33	Loose rock.
162	3·58 years	December 1860	July 1864	34	Rock.
121	4·08 years	March 1859	May 1864	35	Rock.
122	5·08 years	July 1859	August 1864	36	Rock.
122	3·17 years	February 1859	September 1863	37	Broken rock.
237	...	About 6	years	38	Hard rock with fissures.
127	5·17 years	January 1857	December 1862	39	Trap rock.
133	...	...	October 1862	40	Trap rock.
132	5·25 years	October 1856	December 1862	41	Trap rock.
133	5·08 years	October 1856	December 1862	42	Trap rock.
136	4·25 years	May 1856	June 1862	43	Trap rock.
273	4·00 years	August 1856	February 1862	44	Trap rock.
147	3·75 years	January 1857	March 1861	45	Trap rock.
192	Not known	1873	December 1877	46	Columnar basalt. It was originally intended that the line at this place should be in an open cutting, but, owing to numerous slips, due to the existence of clay between the basaltic columns, it was found necessary to construct an arched covered way and fill in above with moorum.
115				47	
565				48	
201				49	
772	About 2 years	April 1883	October 1889	50	Loam.
732	About 3 years	April 1883	October 1889	51	Loam.
244	About 2 years	1884	1886	52	Black trap rock.
289	About 2½ years	1884	1890	53	Limestone rock.
348	1·33 years	March 1884	November 1886	54	.....
274	1·17 years	May 1885	April 1887	55	Black trap and granite gneiss.
184	1·41 years	January 1885	April 1887	56	Head granite rock.
539	0·67 year	1st January 1895	December 1898	57	Through hard sand interspersed with shale with occasional seams of clayey ground and laterite. The tunnel is timbered on the English system with 4 to 6 drawing bars.
783	1 year	February 1895	December 1898	58	Laminated shale throughout.
480	0·31 year	October 1893	December 1899	59	Through loose laminated sandstone. Rock throughout. Except for the faces which are of stone masonry, the lining is of cement concrete averaging 21 inches thick with semi-circular arch and straight side walls.

APPENDICES
of
IMPORTANT DOCUMENTS.

Appendix A.
Important documents.

APPENDIX A.

Memorandum, dated 18th March 1903, by the Honourable Mr. A. T. Arundel, C.S.I., I.C.S., on the anticipated capital expenditure on railways for the year 1903-04.

In preparing the programme of anticipated railway capital expenditure for the year 1903-1904, I have kept the same classification as last year. The proposed allotments for open lines (*a*) are first shown, including the provision of rolling stock, and the other requirements for the maintenance and development of traffic: (*b*) next the funds necessary for the steady prosecution and early completion of lines already in progress; and finally (*c*) the amounts to be allotted for the construction of new lines.

Statement A shows these figures to be as follows:—

	Budget for 1903-1904. Rs.
(*a*) Open lines and rolling stock	(*a*)5,76,68,000
(*b*) Lines already under construction	4,44,24,000
	10,20,92,000
(*c*) New lines proposed to be begun in 1903-1904	79,08,000
	11,00,00,000

As explained last year, the principle followed has been that the amount required to meet the needs of open lines should be regarded as a first charge upon the money available for railway purposes; and that every effort should be made to provide in full for all demands arising out of the development of existing traffic: that next in order, provision should be made for the steady prosecution and early completion of lines in progress; and lastly, that provision should be made for undertaking new projects so far as the State is able to find money to complete them without financial embarrassment to the Government.

2. In the present Statement A no detailed figures are given of the probable expenditure on railways in the years 1904-1905 and 1905-1906, as any such details must necessarily be misleading, but it may be remarked there is no reason to suppose that the requirements for works necessary for dealing with existing traffic and the development of railways will be in any degree less in those years than during 1903-1904; on the contrary, it is probable that they will continue to increase year by year.

3. In earlier years, the money available for Capital expenditure on railways was comparatively scanty and the allotment for open lines had to be restricted to allow of the construction of new lines, but the demands of open lines have gradually become so pressing that it was found necessary to increase the total allotment for Capital expenditure in 1902-1903 and in the coming year (1903-1904) to 11 crores.

4. The following statement shows the allotments for open lines and for lines under construction during the five years from 1899-1909:—

Year.	Open Lines.	Lines under construction and new lines.	Total. Rs.
1899-1900	2,86,23,000	5,96,04,000	8,82,27,000
1900-1901	2,66,70,000	4,64,14,000	7,30,84,000
1901-1902	4,59,97,000	5,72,47,000	10,32,44,000
1902-1903	5,50,82,000	5,49,18,000	11,00,00,000
1903-1904	(*a*) 5,76,68,000	5,23,32,000	11,00,00,000

(*a*) Includes reserve of Rs. 74,08,000 for new lines.

Appendix A—*continued.*

5. Notwithstanding the large increase which has been made in the allotment for railway expenditure, the demands of open lines have grown so much that they now absorb a great part of the money available, and there is every prospect of their continuing to do so if the natural development of the railways is not to be checked.

6. The large allotment for open lines has necessarily reduced the money available for the construction of new lines, and it has only been possible this year to authorise work being begun by the State on 479 miles of railway particulars of which will be found in Statement A.

7. Several offers have, however, been made to the Government for the construction of railways by private promoters or syndicates, a list of which will be found in Statement C. To some, concessions have been given but the companies have not yet been floated. In the case of others, the terms suggested either are such as to practically amount to a guarantee which of course would necessitate the inclusion of the project in, and subject it to the limitations of, the programme, or go greatly beyond the terms hitherto conceded. Their acceptance would involve a complete departure from the terms offered for the construction of branch lines in Resolution No. 514 R.C. of 1896, and the question is one which necessarily requires very careful investigation. To advise on the best methods of extending construction and of administering and working Indian railways, Mr. Thos. Robertson, C.V.O., was appointed by Government as special Commissioner for Indian railways, and Government anticipate that much benefit will be derived from the recommendations and advice in the report which he is about to present.

8. Statement B, "new lines to be taken up as funds permit," has been prepared on the same lines as last year. No specified order of urgency has been adhered to, the new lines being grouped geographically.

9. After providing for the requirements of "open lines" and "lines under construction," the programme for "new construction" provides for an expenditure of Rs. 55,94,000 in the forthcoming year on the following projects:—

1. Jech-Doab (Southern Section).
2. Bengal-Nagpur, including the Gondia-Chanda and the Brahmapuri-Nagpur extension.
3. Lower Sind extension of the North Western railway.
4. Hapur-Meerut.
5. Rameswaram extension of the South Indian railway.

10. The following lines in the Madras Presidency are being constructed as Protective Works chargeable to the Famine Insurance grant:—

	Length in miles.	Gauge.	Estimated cost.
			Rs.
Bellary-Rayadrug	33·00	Metre	8,32,872
Hospet-Kottur	38·10	„	10,37,344
Morrapur-Dharmapoori	18·37	2′ 6″	7,04,914
Tripatur-Krishnagiri	26·47	„	8,82,271
TOTAL	115·94		34,63,401

It is, however, probable that we shall be relieved of the cost of the two metre gauge lines, since a syndicate has applied for permission to construct them along with other "feeders" to the Southern Mahratta railway, for which they have obtained the promise of a guarantee from the Local District Board in which the lines will lie.

Appendix A.
Important documents.

Appendix A—*continued.*

In consideration of the commendable enterprise which certain District Boards in the Madras Presidency have shewn in the matter of improving the means of communication within their jurisdiction, the Government of India, in order to encourage and expedite the construction of railways, have declared their willingness to advance funds from the Provincial Loan Account, on the security of the resources of the Boards which include the proceeds of a special cess leviable under the Local Boards Act, 1884.

Such loans would be repayable in regular instalments, and it is hoped that full advantage will be taken of this measure.

11. The official year 1902-1903 began with a railway mileage of 25,378·34 miles open for traffic and of 2,784·82 miles under construction. Between the 1st of April 1902 and up to date of going to press, 863·85 miles have been added to those open for traffic, and 231·98 miles are expected to be opened before the close of this month, making the total mileage open for traffic at the close of the year 1902-1903, as shown by Statement D, 26,470·57 miles.

Sanction was given during the year to the construction of 682·22 miles of new railway, details of which will also be found in Statement D, and there are now 2,371·07 miles under construction or sanctioned for construction.

12. The railways of India, taken as a whole, for the third year in succession show a balance to the credit of the general revenues after paying working expenses, interest charges and payments for annuities in redemption of Capital. The approximate figures for 1902-1903, as compared with the two previous years, are as follows :—

	1900-1901. (000 omitted.)	1901-1902. (000 omitted.)	1902-1903. (000 omitted.)
	Rs.	Rs.	Rs.
Surplus of revenue over expenditure .	48,77	1,26,99	24,08

13. Compared with the figures of the previous year the results for the year 1902-1903 show a falling off of Rs. 1,02,91. The receipts are less by Rs. 29,94, the working expenses are higher by Rs. 43,87, while interest charges, etc., have increased by Rs. 29,10. Exceptionally favourable conditions obtained in 1901-1902 and the fall in the earnings of the current year was anticipated and allowed for in the Budget Estimate. The increase in working expenses occurs chiefly on the Great Indian Peninsula railway system and on the North Western railway, where largely increased outlay has been necessary on maintenance and renewals of Way and Rolling Stock. The charges for interest, etc., rise with the steadily increasing expenditure on Capital account.

STATEMENT A.

STATEMENT

OF

Anticipated Capital Expenditure on Railways, Open or under Construction, for the year 1903-1904.

Branch lines under Rebate terms are excluded.

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Appendix A.
Important documents.

Appendix A—*continued.*

Capital Expenditure on Railways—1903-1904.

(OMITTING 000).

No.	Railway.	Grants allotted for 1902-1903.	Distribution of grants during 1903-1904.
		Rs.	Rs.
	OPEN LINES.		
	By State Agency.		
1	Eastern Bengal	48,52	46,40
2	Oudh and Rohilkhand	44,45	39,44
3	North Western	60,16	55,00
4	Warora Colliery	—70	—32
5	Stores and Reserve	—1,50	74,08
6	Frontier Railway Reserve	58	...
7	Jodhpur-Hyderabad (British section)	69	30
8	Peshawar Railway Reserve	1	...
	Total Open Lines by State Agency	1,52,21	2,14,90
	By the Agency of Main Line Companies.		
9	East Indian	87,74	1,03,95
10	Rajputana-Malwa	24,00	27,00
11	Tirhoot	33,65	15,50
12	South Indian	3,00	15,50
13	Great Indian Peninsula	16,25	26,50
14	Madras Railway—North-East line	20,00	20,00
15	Bezwada Extension	8	18
16	Guntakal-Mysore Frontier	6	13
17	Bhopal	2,70	3,00
18	Nilgiri	*35,17	23
19	Palanpur-Deesa	4	...
	Total Open Lines by Agency of Main Line Companies	2,22,69	2,11,99
	Carried over	3,74,90	4,26,89

* Purchase price Rs. 35,25
Grant for 1902-03 —8
35,17

Appendix A—*continued.*

Capital Expenditure on Railways—1903-1904—contd.

(OMITTING 000.)

No.	Railway.	Grants allotted for 1902-03.	Distribution of grants during 1903-04.
	OPEN LINES—*contd.*	Rs.	Rs.
	Brought forward	3,74,90	4,26,89
	AGAINST THE CAPITAL ACCOUNTS OF THE OLD GUARANTEED RAILWAY COMPANIES.		
20	Madras	20,69	30,00
21	Bombay, Baroda and Central India	21,59	15,00
	Total Open Lines, old Guaranteed Companies	42,28	45,00
	AGAINST THE CAPITAL ACCOUNTS OF INDIAN RAILWAY COMPANIES OTHER THAN THE OLD GUARANTEED RAILWAY COMPANIES.		
22	Bengal Central	2,41	1,31
23	Bengal-Nagpur (including Northern section of East Coast railway)	8,79	12,00
24	Burma	38,57	30,00
25	Indian Midland	12,04	40,00
26	Lucknow-Bareilly	9,88	10,25
27	Southern Mahratta (including Mysore)	6,93	9,79
	Total Open Lines, other Railway Companies	78,62	1,03,35
	CAPITAL ACCOUNTS OF BRANCH LINE COMPANIES WITH A FIRM GUARANTEE.		
28	Hardwar-Dehra	10	1,20
29	Brahmaputra-Sultanpur	87	24
	Total Open Lines by Branch Line Companies	97	1,44
	TOTAL OPEN LINES—carried over	4,96,77	5,76,68

Appendix A—*continued.*

Capital Expenditure on Railways—1903-1904—contd.

(OMITTING 000.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1901-02.	Grants allotted during 1902-03.	Distribution of grants during 1903-04.
		Miles.	Rs.	Rs.	Rs.	Rs.
	c Total Open Lines—brought forward	...	...	...	4,96,77	5,76,68
	LINES UNDER CONSTRUCTION.					
	By Agency of Main Line Companies.					
30	Sabarmati-Dholka	...	...	...	60	...
31	Assam-Bengal (i) Construction chargeable to Part II; (ii) Land chargeable to Part I	743	12,00,00	*10,60,90	†72,44	30,00
	Assam-Bengal (iii) Chittagong jetties	...	7,36	6,63		4,00
32	East Indian (i) Barun-Daltonganj	78	76,55	c 57,32	9,24	2,00
	East Indian (ii) Grand Chord	99	1,41,14	5,98	20,95	63,14
	East Indian (iii) Colliery Sidings	14	8,86	1,05	5,07	2,91
	East Indian (iv) Shikohabad-Furukhabad	66	45,20	...	6,50	15,50
33	Madura-Pamban (including Rameswaram Extension)	100	96,64	47,78	12,51	11,00
34	Marina loop	8	14,92	...	6	5,25
35	Tinnevelly-Quilon, British section	50	45,06	26,86	6,17	6,70
36	Ditto Native state section	58	1,12,65	50,81	31,19	20,25
37	Azikhal-Mangalore	77	1,08,63	...	4,45	30,00
	Total	1,293	18,57,01	12,57,33	1,69,18	1,90,75
	Against the Capital Account of the old Guaranteed Railway Companies.					
38	Calicut-Cannanore branch, Madras railway	59	67,55	70,23	13,40	1,50
39	Godhra-Baroda, B., B. & C. I. ry.	44	34,11	...	11,50	12,00
	Total	103	1,01,66	70,23	24,90	13,50
	Against the Capital Account of Indian Railway Companies other than the old Guaranteed Railway Companies.					
40	Bengal-Nagpur Sini-Midnapur-Cuttack-Calcutta	353	8,02,45	8,52,66	1,66,13	1,32,00
	Bengal-Nagpur Jubbulpore-Gondia (Satpura)	253	85,11			
	Bengal-Nagpur Midnapur-Jherria extension	114	1,07,81			
	Bengal-Nagpur Grand Chord link	28	31,57			
	Bengal-Nagpur Colliery lines	25	18,54			
41	Letpadan-Henzada-Bassein Extension, Burma railways	109	98,62	66,84	19,93	4,50
	Total	882	11,44,10	9,19,50	1,86,06	1,36,50
	Total Lines under Construction by Companies—carried over	22,78	31,02,77	22,47,06	3,80,14	3,40,75
	Total Open Lines—carried over	...	...	...	4,96,77	5,76,68

* Includes Rs. 4,49,38 from Company's funds.
† Includes a credit of Rs. 62 to Company's funds.

Appendix A—*continued.*

Capital Expenditure on Railways—1903-1904—contd.

(OMITTING 000.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1901-02.	Grants allotted during 1902-03.	Distribution of grant during 1903-04.
		Miles.	Rs.	Rs.	Rs.	Rs.
	Total Open Lines—brought forward	...	...	...	4,96,77	5,76,68
	Total Lines under Construction—brought forward	2,278	31,02,77	22,47,06	3,80,14	3,40,75
	LINES UNDER CONSTRUCTION—*contd.*					
	By the State.					
42	Agra-Delhi Chord	121	90,76	1,02	17,65	45,00
43	Eastern Bengal. (i) Chitpore extension	...	20,45	17,17	7,53	5,00
	Eastern Bengal. (ii) Doubling the line between Dum-Dum and Kancoorgachi Chord	28	24,51	1,26	7,19	7,25
	Eastern Bengal. (iii) Rungpur-Dhubri	51	45,44	55,02	6,72	1,10
	Eastern Bengal. (iv) Dhubri-Gauhati	151	92,31	...	32	10,00
44	Nowshera-Durgai	42	22,08	20,56	4,87	1,50
45	Khushalgarh-Kohat-Thal	88	50,96	32,26	22,55	1,25
46	Jech-Doab (Northern section)	52	25,70	1,56	14,47	5,40
47	Allahabad-Fyzabad	97	1,17,09	6,29	53,49	46,25
48	Moorshedabad branch, Eastern Bengal State railway	96	84,48	...	16,13	40,00
49	Quetta-Nushki	82	70,06	...	6,75	10,00
50	Hapur-Meerut	20	5,75	...	...	6,94
51	Balamau-Madhoganj	14	3,88	...	...	2,88
	Total Lines under Construction by the State	842	6,53,47	1,35,14	1,57,67	1,82,57
	Total Lines under Construction	3,120	37,56,24	23,82,20	5,37,81	5,23,32
	Grand Total—Open Lines and Lines under Construction	...	...	...	10,34,58	11,00,00

Appendix A—*continued.*

Statement of Capital Expenditure on Railways—1903-1904—concld.

(OMITTING 000.)

No.	Railway.			Distribution of grants during 1903-04.
	ABSTRACT BY OPEN LINES AND CONSTRUCTION.			
	I.—Capital for Open Lines.			Rs.
	i. By State agency			2,14,90
	ii. By agency of Main Line Companies			2,11,99
	iii. By „ „ old Guaranteed Companies			45,00
	iv. By „ „ other Railway Companies			1,03,35
	v. By „ „ Branch Companies			1,44
		Total Open Lines		5,76,68
	II.—Capital for Lines under Construction by Companies.			
	i. By agency of Main Line Companies			1,90,75
	ii. By „ „ old Guaranteed Railway Companies			13,50
	iii. By „ „ other railway Companies			1,36,50
	iv. By „ „ Branch Line Companies			...
		Total Lines under Construction by Companies		3,40,75
	III.—Capital for Lines under Construction by the State			1,82,57
		GRAND TOTAL		11,00,00
	ABSTRACT SHOWING DISTRIBUTION BY FUNDS.			
I.—From Imperial Funds.	(i) By State Agency	(a) Open Lines		2,14,90
		(b) Construction		1,82,57
			Total	3,97,47
	(ii) By the Agency of Main Line Companies.	(a) Open Lines		2,11,99
		(b) Construction		1,90,75
			Total	4,02,74
			Total, I	8,00,21
II.—Against the Capital Accounts of the old Guaranteed Railway Companies.		(a) Open Lines		45,00
		(b) Construction		13,50
			Total, II	58,50
III.—Against the Capital Accounts of Indian Railway Companies other than the old Guaranteed Railway Companies.		(a) Open Lines		1,03,35
		(b) Construction		1,36,50
			Total, III	2,39,85
IV.—Against the Capital Accounts of Branch Line Companies which are in receipt of a firm Government Guarantee.		(a) Open lines		1,44
		(b) Construction		...
			Total, IV	1,44
	Total I to IV	(a) Open Lines		5,76,68
		(b) Construction		5,23,32
			GRAND TOTAL	11,00,00

Appendix A—*continued.*

Statement B.

List of new lines to be taken up as funds permit, with the estimated yearly provision required to ensure an economical rate of progress when once started.

(Lakhs of rupees.)

No.	Railway.	Miles.	Estimated cost.	Approximate amount each year.				
				1st.	2nd.	3rd.	4th.	Future.
			Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.
	EAST INDIAN RAILWAY SYSTEM—							
1	Agra City terminus	...	9	9	...	...	...	...
2	Bishenpur-Hooghly	71	132	20	62	50	...	...
3	Hooghly-Cutwa	65	64	4	30	30	...	...
	BENGAL-NAGPUR RAILWAY SYSTEM—							
4	Gondia-Chanda (including Brahmapuri-Nagpur)	200	60	15	25	20	...	...
5	Vizianagram-Raipur	310	250	10	60	60	60	60
	EASTERN BENGAL STATE RAILWAY—							
6	Quadrupling Eastern Bengal State railway	20	32	10	10	12	...	...
7	Ganges bridge at Sara (or elsewhere)	...	110	10	30	50	20	...
	BENGAL AND NORTH-WESTERN RAILWAY—							
8	Mansi-Baptiahi	79	50	10	20	20	...	...
9	Bairagnia-Shikarpur	58	35	20	15	...	...	...
10	Bettiah-Bagaha	49	32	20	12	...	...	...
11	Katihar-Godagiri or Sara (exclusive of Ganges bridge).	187	155	15	50	50	40	...
12	Shikarpur-Bikna-Thoree	22	5	5	...	...	...	...
13	Sakri-Jainagar	30	16	5	11	...	...	...
	OUDH AND ROHILKHAND RAILWAY—							
14	Moradabad-Rampur	52	25	10	15	...	...	...
15	Allahabad-Jaunpur	62	48	10	30	8	...	...
16	Bareilly-Soron	63	54	10	30	14	...	...
17	Minor feeder lines to Oudh and Rohilkhand railway.	100	50	10	20	20	...	...
	NORTH WESTERN RAILWAY—							
18	Lower Sind extension	61	35	20	15	...	...	...
19	Indus bridge (Khushalgarh)	2	12	2	10	...	...	...
20	Conversion Khushalgarh-Kohat railway to 5' 6" gauge.	91	15	5	10	...	...	...
21	Minor feeder lines to North Western railway	100	50	10	20	20	...	...
	BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—							
22	Rewari-Phulera	133	53	3	30	20	...	...
23	Baran-Ajmer-Marwar	213	135	16	48	48	23	...
24	Bombay-Kutch connection	275	340	10	30	30	30	240
25	Nagda-Baran-Muttra (or Bandikui)	355	350	10	50	90	90	110
	GREAT INDIAN PENINSULA RAILWAY—							
26	Warora-Chanda	42	46	16	30	...	...	...
27	Minor feeder lines to Great Indian Peninsula railway.	60	30	5	15	10	...	...
	MADRAS RAILWAY—							
28	Coonoor-Ootacamund	12	19	9	10	...	...	...
	SOUTHERN MAHRATTA AND SOUTH INDIAN RAILWAYS—							
29	Trichinopoly-Tirukoilur	97	75	10	35	30	...	...
30	Nanjangud-Erode	120	123	23	50	50	...	...
31	Phirangipuram-Gurzala (famine feeder)	51	13	3	10	...	...	...
	BURMA RAILWAY—							
32	Henzada-Kyangin	66	55	15	30	10	...	...
33	Pegu-Moulmein	70	75	5	40	30	...	...
34	Pegu-Syriam	100	64	10	30	24	...	...
35	Sagaing bridge	...	50	10	25	15	...	...
	TOTAL	3,216	2,667	375	908	711	263	410

Appendix A—*continued.*

Statement C.

Statement showing the lines of railway proposed, or which were or are the subject of negotiations, for construction by private companies.

No.	Name of railway.	Length.	Estimated cost.	Remarks.
	Madras—	Miles.	Rs.	
1	Kurnool Road (Dhone)—Kurnool	32	7,11,000	Negotiations still proceeding, the promoters having asked for certain modifications of the terms offered and for the inclusion in the original scheme of railways 3 to 6. Concession extended to 31st March 1903.
2	Bezwada-Masulipatam	50	27,89,000	
3	Guntur-Repalle	38	17,34,000	
4	Phirangipuram-Gurzala	51	12,60,000	
5	Bellary-Rayadrug	33	8,33,000	
6	Hospet-Kottur	38	10,37,000	
7	Vizianagram-Raipur with Sointilla branch	359	2,81,05,000	Negotiations in progress.
8	Berhampore-Russelkonda	49	14,91,000	
	Hyderabad—			
9	Raichur-Wondalli	43	12,53,000	Concession granted in June 1900, but scheme no further advanced.
	Rajputana—			
10	Baran-Ajmer-Marwar	213	1,36,67,000	Under consideration.
11	Nagda-Baran-Muttra	355	3,50,69,000	
	United Provinces of Agra and Oudh—			
12	Fatehpur-Markundi	72	98,46,000	Negotiations dropped by the promoters.
	Punjab—			
13	Kangra Valley	90	50,84,000	Negotiations in progress.
14	Jullundur-Hoshiarpur	24	14,10,000	
15	Amritsar-Tarn Taran-Patti	27	13,39,000	
16	MacLeodganj Road-Fazilka-Ferozepore-Ludhiana	150	(*a*)	
17	Rawal Pindi-Murree with extension to Kuldana and Gharial	50	(*b*)	Under consideration.
	Bengal—			
18	Shibnibash (Kissengunge)—			
	Kotchandpur-Magura	64	49,94,000	Negotiations dropped by the promoters.
19	Phulbari-Sumjhia	13	4,42,000	
20	Akhaura-Bhairab Bazar	19	19,42,000	Concession lapsed.
21	Hooghly-Cutwa-Ahmedpur-Ondal	139	(*c*)	Negotiations in progress.
22	Burdwan-Cutwa	34	26,49,000	
	Assam—			
23	Tilagaon-Sylhet	39	36,17,000	Concession lapsed.

(*a*) The Ferozepore-Ludhiana section, 77 miles, has alone been surveyed and is estimated to cost Rs. 44,66,000.
(*b*) Under survey.
(*c*) The Hooghly-Cutwa section, 65 miles, and the Cutwa-Ahmedpur section, 32 miles, which have been surveyed, are respectively estimated to cost Rs. 63,12,000 and Rs. 32,00,000.

Appendix A—*continued.*

STATEMENT D.

Memorandum on the construction of railways.

		Miles.	Miles.
(i)	East Indian	1,838·04	
	Bengal Central (*a*)	125·01	
	Bengal-Nagpur	1,552·98	
	Indian Midland	(*b*) 796·25	
	Great Indian Peninsula	1,549·27	6,532·60
	Bhopal-Itarsi (*British section*)	(*b*) 13·11	
	Godhra-Ratlam-Nagda	(*c*) 141·14	
	Bezwada extension	(*d*) 20·58	
	Madras railway (North-East line)	(*e*) & (*f*) 497·22	
(ii)	North Western	(*g*) & (*h*) 3,077·12	
	Oudh and Rohilkhand	1,037·53	4,382·69
	Eastern Bengal	268·04	
(iii)	Bombay, Baroda and Central India	460·90	1,334·07
	Madras	873·17	
(iv)	Delhi-Umballa-Kalka	(*i*) 162·24	
	Tarkessur	(*i*) 22·23	
	South Behar	(*i*) 78·76	
	Southern Punjab	(*j*) 4,23·93	882·33
	Hardwar-Dehra	(*k*) 32·04	
	Tapti Valley	(*c*) 155·48	
	Calcutta Port Commissioners	7·65	
(v)	Khamgaon	(*b*) 7·89	
	Amraoti	(*b*) 5·72	
	Bina-Goona-Baran	(*b*) 145·59	
	Bhopal-Ujjain	(*b*) 113·27	
	Bhopal-Itarsi (*Native state section*)	(*b*) 44·28	723·50
	The Nizam's Guaranteed State	330·18	
	Nagda-Ujjain	(*c*) 34·32	
	Petlad-Cambay (Anand-Tarapur section)	(*c*) 21·50	
	Petlad-Cambay (Tarapur-Cambay section	(*c*) 10·92	
	Kolar Gold-fields	(*e*) 9·88	
(vi)	Rajpura-Bhatinda	(*j*) 107·05	
	Jammu and Kashmir (*Native state section*)	(*j*) 15·92	201·63
	Ludhiana-Dhuri-Jakhal	(*j*) 78·66	
(vii)	Bengal and North-Western—		
	Tirhoot section	519·10	
	Company's section (*l*)	749·00	
	Rohilkund and Kumaon (Lucknow-Bareilly section)	231·17	
	Rajputana-Malwa	(*c*), (*k*) & (*m*) 1,648·36	
	Palanpur-Deesa	(*c*) 17·28	
	Southern Mahratta	1,042·04	
	Guntakal-Mysore frontier	(*n*) 119·50	7,595·41
	Mysore section (Southern Mahratta)	(*n*) 296·36	
	South Indian	1,038·63	
	Tanjore District Board (Mayavaram-Mutupet)	(*o*) 54·08	
	Assam-Bengal	589·21	
	Burma	1,177·70	
	Jodhpur-Hyderabad (*British section*)	(*p*) 128·98	
(viii)	Eastern Bengal—		
	Northern and Behar sections (*including the Kaunia-Dharlla, 2′ 6″ gauge branch, and British section, Cooch Behar-Santrabari extension, 2′ 6″ gauge*)	502·41	
	Dacca section	35·92	667·93
	Cawnpore-Burhwal (*Metre gauge link*)	(*q*) 79·60	
(ix)	Deoghur	4·75	
	Brahmaputra-Sultanpur	(*r*) 59·19	
	Mymensingh-Jamalpur-Jagannathganj	(*r*) 53·37	
	Rohilkund and Kumaon (*Company's section*)	53·92	
	Bengal Dooars	36·40	
	Bengal Dooars extensions	77·56	463·42
	Dibru-Sadiya	77·50	
	Ledo and Tikak-Margherita Colliery	(*s*) 11·00	
	Ahmedabad Parantij	(*t*) 54·70	
	Sagauli-Raxaul	(*t*) 18·09	
	Nilgiri	(*u*) 16·90	
(x)	Gaekwar's Mehsana	(*v*) 92·68	
	Hyderabad-Godavari Valley	(*d*) 391·42	
	Kolhapur	(*w*) 29·27	
	Hindupur (Yesvantpur-Mysore frontier)	(*x*) 51·85	618·25
	Mysore-Nanjangud	(*n*) 15·66	
	Birur-Shimoga	(*n*) 37·92	
(xi)	Jodhpur-Bikaner	612·29	
	Udaipur-Chitor	67·30	
	Bhavnagar Gondal-Junagad-Porbandar	(*u*) 333·94	
	Jetalsar-Rajkot	(*v*) 46·28	1,134·77
	Jamnagar	(*w*) & (*w*) 54·25	
	Dhrangadra	(*v*) 20·83	
(xii)	West of India Portuguese	51·11	
	Pondicherry	(*o*) 7·85	73·61
	Karaikal-Peralam	(*o*) 14·65	
(xiii)	Bengal-Nagpur (Raipur-Dhamtari branch, 2′ 6″)		56·24
(xiv)	Jorhat (2′ 0″)	30·25	
	Nowshera-Durgai (2′ 6″)	(*j*) 40·25	76·68
	Dandot Light (2′ 0″)	(*j*) 6·18	
(xv)	Darjeeling-Himalayan (2′ 0″)	51·00	
	Barsi Light (2′ 6″)	21·50	
	Howrah-Amta (2′ 6″)	26·69	
	Howrah-Sheakhala (2′ 0″)	19·75	
	Ranaghat-Krishnagarh (2′ 6″)	20·25	239·76
	Tarakeshwar-Magra (2′ 6″)	31·12	
	Tezpur-Balipara (2′ 6″)	20·10	
	Powayan Light (2′ 6″)	(*x*) 39·50	
	Thaton-Duyinzaik Light (2′ 6″)	7·76	
(xvi)	Gaekwar's Dabhoi (2′ 6″)	(*c*) 78·80	
	Rajpipla (2′ 6″)	(*c*) 37·37	
	Parlakimedi	(*y*) 25·00	267·31
	Gwalior Light (2′ 0″)	(*b*) 126·14	
(xvii)	Cooch Behar (2′ 6″)		(*r*) 33·78
(xviii)	Morvi (2′ 6″)		94·36

At the commencement of 1902-03, *i.e.*, on the 1st April 1902, the total length of railways open for traffic was 25,378·34 miles, made up as follows :—

		Miles.	Miles.
5′ 6″ gauge—			
(i)	State lines worked by companies	6,532·60	
(ii)	State lines worked by the State	4,382·69	
(iii)	Guaranteed companies	1,334·07	
(iv)	Assisted companies	882·33	
(v)	Lines owned by native states and worked by companies	723·50	
(vi)	Lines owned by native states and worked by state railway agency	201·63	
			14,056·82
3′ 3¾″ gauge—			
(vii)	State lines worked by companies	7,595·41	
(viii)	State lines worked by the State	667·93	
(ix)	Assisted companies	463·42	
(x)	Lines owned by native states and worked by companies	618·25	
(xi)	Lines owned and worked by native states	1,134·77	
(xii)	Foreign lines	73·61	
			10,553·39
Special 2′ 6″ and 2′ 0″ gauges—			
(xiii)	State lines worked by companies	56·24	
(xiv)	State lines worked by the State	76·68	
(xv)	Assisted companies	239·76	
(xvi)	Lines owned by native states and worked by companies	267·31	
(xvii)	Lines owned by native states and worked by state railway agency	33·78	
(xviii)	Lines owned and worked by native states	94·36	
			768·13
	TOTAL		25,378·34

(*a*) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(*b*) Worked by the Great Indian Peninsula Railway Company.
(*c*) Worked by the Bombay, Baroda and Central India Railway Company.
(*d*) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(*e*) Worked by the Madras Railway Company.
(*f*) Including 2·66 miles laid on a mixed (5′ 6″ and 3′ 3¾″) gauge, and 0·31 mile on the 3′ 3¾″ gauge.
(*g*) Including 5·63 miles of military line not used for public traffic.
(*h*) Including 26·28 miles of mixed (5′ 6″ and 3′ 3¾″) gauge between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputana-Malwa railways.
(*i*) Worked by the East Indian Railway Company.
(*j*) Worked by the North Western State railway.
(*k*) Worked by the Oudh and Rohilkhand State railway.
(*l*) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
(*m*) Including 2·10 miles at Ujjain and 3·07 miles between Agra East bank and Agra cantonment, laid on the 5′ 6″ gauge.
(*n*) Worked by the Southern Mahratta Railway Company.
(*o*) Worked by the South Indian Railway Company.
(*p*) Worked by the Jodhpur-Bikaner railway.
(*q*) Excluding 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh, but including the length, Bara Banki to Burhwal, 16·79 miles, and the length over the Cawnpore bridge, 0·59 mile, laid on a mixed gauge.
(*r*) Worked by the Eastern Bengal State railway.
(*s*) Worked by the Assam Railways and Trading Company.
(*t*) Worked by the Bengal and North-Western Railway Company.
(*u*) Including 4·87 miles of Bhavnagar Dock estates and Junagad quarry lines.
(*v*) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
(*w*) Including 2·99 miles of Bedi-Bandar Dock estate siding.
(*x*) Worked by the Rohilkund and Kumaon Railway Company.
(*y*) Worked by the Bengal-Nagpur Railway Company.

Appendix A—*continued.*

And the mileage under construction or sanctioned for construction on the same date was 2,784·82 miles as follows:—

		Miles.	Miles.
5′ 6″ gauge—			
(i)	State lines worked by companies ...	568·02	
(ii)	State lines worked by the State ...	157·70	
(iii)	Guaranteed companies	31·09	
(iv)	Assisted companies ...	0·79	
			757·60
3′ 3¾″ gauge—			
(v)	State lines worked by companies ...	760·59	
(vi)	State lines worked by the State ...	36·85	
(vii)	Assisted companies ...	107·41	
(viii)	Lines owned by native states and worked by companies ...	164·57	
(ix)	Lines owned and worked by native states ...	160·85	
			1,230·27
Special (2′ 6″ and 2′ 0″) gauges—			
(x)	State lines worked by companies ...	252·67	
(xi)	State lines worked by the State ...	92·20	
(xii)	Assisted companies ...	354·45	
(xiii)	Lines owned by native states and worked by companies ...	97·63	
			796·95
TOTAL ...			2,784·82

There was thus a grand total of railways completed and in hand, on the 1st April 1902, of miles ... 28,163·16

			Miles.	Miles.
(i)	East Indian—			
	Shikohabad to Farukhabad (*a*)	65·82		
	Sone East bank to Daltonganj	78·32		
	Manpur to 0·87 mile beyond Gurpa ...	25·25		
	Portion of the main line of the Moghal Sarai-Gya branch	0·94		
	Mile 132 from Howrah to Sitarampur ...	6·99	121·33	
	Katrasgarh to Khanoodih	7·80		
	Jherriah to Dhanbaid	3·75		
	Tasra siding	1·75		
	Northern half of the Mulkeera-Katrasgarh cross connection	0·71		
	Bengal-Nagpur—			
	Hooghly foreshore to Kidderpore Docks ...	0·60		
	Midnapore to Bhojudih	114·77		
	Ramkanali to Nodeeha in the Chaurassie coal-fields	9·48		568·02
	Bhojudih to Hartharpur (*a*)	27·90		
	Bhojudih to Parshadihi	1·45	177·77	
	Bhojudih to Mhoda, including the Bhaga connection	21·36		
	Bhowra siding	1·50		
	Southern half of the Mulkeera-Katrasgarh cross connection	0·71		
	Agra-Delhi Chord (*a*)		121·16	
	Azikhal-Mangalore extension		77·76	
(ii)	North Western—			
	Jech Doab line—			
	Malakwal to the Karana Hills		51·40	
	Oudh and Rohilkhand—			
	Allahabad to Fyzabad		94·67	157·76
	Eastern Bengal—			
	Extension of Chitpore terminus	1·66		
	Pancheoria to the Ganges	6·00	11·63	
	Kankurgachi to new Junction	3·97		
(iii)	Madras—			
	Badagara to Azhikal		...	31·09
(iv)	Southern Punjab—			
	Delhi Brewery to Delhi		...	0·79
	Bengal and North-Western—			
	Tirhoot section—			
	Sakri to Jainagar (*a*)	30·47		
	Kosi bridge and approaches, Kursela to Katareah	3·75	100·22	
	Company's section—			
	Azamgarh to Shahganj	34·84		
	Ballia to Ghazipur	31·16		
	Rohilkund and Kumaon (Lucknow-Bareilly section)—			
	Dudhwa to the Mohan river		5·96	
	Rajputana-Malwa—			
	Rewari-Phulera Chord (*a*)		133·32	
(v)	South Indian—			760·5
	Madura to Mandapam	91·33	100·33	
	Tiruppachettu to Sivaganga	9·00		
	Tinnevelly-Quilon (Travancore) (British section)—			
	Tinnevelly bridge to the British frontier near Shencottah		50·33	
	Tanjore District Board (Mayavaram-Mutupet)—			
	Mutupet to Arantangi	44·86		
	Adarampatnam and Thambikkottai sale sidings and Arantangi quarry branch ...	5·63	50·49	
	Assam-Bengal—			
	Damchara to Lumding	99·40		
	Lakwa to Tinsukia	55·84	155·24	
	Burma—			
	Haipaw to Lashio (*b*)	50·30		
	Bassein *vid* Henzada to Letpadan	114·40	164·70	
(vi)	Eastern Bengal—			
	New Gitaldaha station to Dhubri		...	36·85
(vii)	Bengal Dooars—			
	Chalsa to Hantupara		39·00	
	Noakhali (Bengal)—			
	Laksam *vid* Noakhali to Ichakhali		34·95	107·41
	Ahmedabad-Dholka—			
	Sabarmati to Dholka		33·46	
(viii)	Vijapur-Kalol-Kadi—			
	Vijapur to Kadi		41·80	
	Shoranur-Cochin—			
	Shoranur to Ernakulam		64·83	164·57
	Tinnevelly-Quilon (Travancore) (Native state section)—			
	Quilon to the frontier of the Travancore state near Shencottah		57·94	
(ix)	Jodhpur-Bikaner—			
	Bikaner section—			
	Suratgarh to Bhatinda		88·00	
	Jaipur—			160·85
	Ganganer to Siwai-Madhopur		72·85	
(x)	Bengal-Nagpur (Jabbulpore-Gondia extension) (2′ 6″)—			
	Jubbulpore to Gondia		143·43	
	Nainpur to Mandla		21·75	252·67
	Nainpur to Chindwara		87·49	
(xi)	Kushalgarh-Kohat-Thal (3′ 6″)		...	92·20
(xii)	Barsi Light (2′ 6″)—			
	Barsi Road Junction to Pandharpur (*a*) ...	31·00		
	Barsi Town to Tadwala ...	26·70	57·70	
	Kalka-Simla (2′ 6″)		60·00	
	Bukhtiarpur-Behar Light (2′ 6″)—			
	Bukhtiarpur to Behar		18·75	
	Madura District Board (2′ 0″)—			354·45
	Ammayanayakkanur to Kotagudi ...	55·00		
	Periyakulam to Krishna-Manaik's Tope ...	5·00	93·00	
	Theni to Karuvanath	33·00		
	Shahdara-Saharanpur Light—			
	Shahdara-Saharanpur	96·00		
	Baraut to Meerut	30·00	126·00	
(xiii)	Rewah (2′ 6″)—			
	Rewah to Sutna (*a*)		31·61	
	Gaekwar's Dabhoi (2′ 0″)—			97·63
	Padra to Mhoba		9·00	
	Gwalior Light (3′ 0″)—			
	Gwalior to Sabulgarh		56·82	

(*a*) Commencement of work not yet authorized.
(*b*) The portion of the Mandalay-Kunlon railway from Lashio to the right bank of the Salween river, 52·02 miles, has been abandoned.

Appendix A—*continued.*

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Mile 0·87 beyond Gurpa to Hariharpur		74·54	
	Indian Midland—			
	Ait to Kunch		8·85	84·32
	Madras (North-East line)—			
	Korukkuppetai to Basin Road station		0·93	
(ii)	North Western—			
	Junction with North Western State railway, 12 miles from Quetta to Nushki		82·50	
	Oudh and Rohilkhand—			
	Balamau to Madhoganj		14·47	171·97
	Eastern Bengal—			
	Ranaghat to Moorshedabad		75·00	
(iii)	Bombay, Baroda and Central India—			
	Godhra to Baroda			44·85
(iv)	Bengal and North-Western—			
	Company's section—			
	Aunrihar to Jaunpur		36·14	
	Famine lines (Madras Presidency)—			
	Bellary to Rayadrug	33·00		
	Hospet to Kottur	38·10	71·10	115·62
	South Indian—			
	Marina Loop—			
	Saidapet to Madras Beach		8·38	
(v)	Eastern Bengal—			
	Golokganj to the Brahmaputra, opposite Gauhati ...			151·62
(vi)	Famine lines (Madras Presidency)—			
	Morappur to Dharmapuri (2′ 6″)		18·37	
	Tirupattur to Krishnagiri (2′ 6″)		26·47	44·84
(vii)	Howrah-Amta (2′ 0″)—			
	Jagatballubpur to Champadanga	17·50		
	Antpur to Rajbulhat	3·50	21·00	
	Dwara-Therria (2′ 6″)—			40·50
	Noorpore to Therria Ghat		19·50	
(viii)	Moharbhanj (2′ 6″)—			
	Baripada to Baripada Road station			28·50
(ix)	East Indian—			
	Mile 132 from Howrah to Sitarampur ...		6·99	
	Sone East bank to Daltonganj		78·13	86·06
	Portion of the main line of the Moghal Sarai-Gya branch		0·84	
	Bengal-Nagpur—			232·27
	Hooghly foreshore to Kidderpore Docks ...		0·60	
	Midnapore to Bhojudih		114·77	
	Bhojudih to Mihoda, including the Bhaga connection		31·36	146·21
	Ramkanali to Noodeeha, in the Chaurassie coal-fields		9·48	
(x)	Eastern Bengal—			
	Extension of Chitpore terminus		1·66	
	Panchooria to the Ganges		6·00	7·66
(xi)	Madras—			
	Badagara to Azhikal			31·98
(xii)	Bengal and North-Western—			
	Tirhoot Section—			
	Kosi bridge and approaches Kursela to Katareah		5·75	
	Company's section—			
	Azamgarh to Shahganj		34·84	69·75
	Ballia to Ghazipur		31·16	
	South Indian—			
	Madura to Mandapam		90·96	
	Tinnevelly-Quilon (Travancore) (British section)			
	Tinnevelly Bridge to Kallidaikurichi		19·07	417·35
	Tanjore District Board (Mayavaram-Mutupet)—			
	Mutupet to Pattukottai		17·03	
	Assam-Bengal—			
	Lakwa to Tinsukia		55·84	
	Burma—			
	Hsipaw to Lashio	50·30		
	Bassein *vid* Henzada to Letpadan	114·40	164·70	
(xiii)	Eastern Bengal—			
	New Gitaldaha station to Dhubri			39·85
(xiv)	Bengal-Dooars—			
	Chalsa to Raina		15·00	
	Ahmedabad-Dholka—			48·46
	Sabarmati to Dholka		33·46	
(xv)	Vijapur-Kalol-Kadi—			
	Vijapur to Kadi		41·80	
	Shoranur-Cochin—			106·63
	Shoranur to Ernakulam		64·83	
(xvi)	Jodhpur-Bikaner—			
	Bikaner section—			
	Suratgarh to Bhatinda			66·00
(xvii)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Gondia to Balaghat			25·23
(xviii)	Khushalgarh-Kohat-Thal (2′ 6″)—			
	Khushalgarh *vid* Kohat to Thal			92·20
(xix)	Gaekwar's Dabhoi (2′ 6″)—			
	Padra to Mhoba			9·20

During 1902-1903, *i.e.*, from 1st April 1902 to 31st March 1903, 682·22 miles of new railway have been authorized as follows :—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	84·32	
(ii) State lines worked by the State	171·97	
(iii) Guaranteed companies ...	44·85	
		301·14
3′ 3⅜″ gauge—		
(iv) State lines worked by companies	115·62	
(v) State lines worked by the State	151·62	
		267·24
Special (2′ 6″ and 2′ 0″) gauges—		
(vi) State lines worked by companies	44·84	
(vii) Assisted companies ...	40·50	
(viii) Lines owned by native states and worked by companies	28·50	
		113·84
TOTAL ...		682·22

And 1,095·83 miles have been or are likely to be opened to public traffic as follows :—

	Miles.	Miles.
5′ 6″ gauge—		
(ix) State lines worked by companies	232·27	
(x) State lines worked by the State	7·66	
(xi) Guaranteed companies ...	31·98	
		271·91
3′ 3⅜″ gauge—		
(xii) State lines worked by companies	417·35	
(xiii) State lines worked by the State	39·85	
(xiv) Assisted companies ...	48·46	
(xv) Lines owned and worked by companies	106·63	
(xvi) Lines owned and worked by native states ...	83·00	
		697·29
Special (2′ 6″) gauge—		
(xvii) State lines worked by companies	25·23	
(xviii) State lines worked by the State	92·20	
(xix) Lines owned by native states and worked by companies ...	9·20	
		126·63
TOTAL ...		1,095·83

Appendix A.
Important documents.

The total length of open line at the commencement of 1903-1904, *i.e.*, on the 1st April 1903, will, therefore, be 26,470·57 miles, comprising :—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	6,777·63	
(ii) State lines worked by the State	4,397·92	
(iii) Guaranteed companies ...	1,366·25	
(iv) Assisted companies ...	882·21	
(v) Lines owned by native states and worked by companies ...	709·89	
(vi) Lines owned by native states and worked by state railway agency ...	202·93	
		14,336·83
3′ 3⅜″ gauge—		
(vii) State lines worked by companies ...	8,024·29	
(viii) State lines worked by the State	699·09	
(ix) Assisted companies ...	495·40	
(x) Lines owned by native states and worked by companies ...	725·02	
(xi) Lines owned and worked by native states ...	1,223·04	
(xii) Foreign lines	73·61	
		11,240·45
Special (2′ 6″ and 2′ 0″) gauges—		
(xiii) State lines worked by companies	81·47	
(xiv) State lines worked by the State	168·88	
(xv) Assisted companies ...	239·76	
(xvi) Lines owned by native states and worked by companies	276·51	
(xvii) Lines owned by native states and worked by state railway agency ...	33·60	
(xviii) Lines owned and worked by native states ...	93·07	
		893·29
TOTAL ...		†26,470·57

Appendix A—*continued.*

		Miles.	Miles.
(i)	East Indian	*1,923·92	
	Bengal Central (*a*)	125·01	
	Bengal-Nagpur	1,699·19	
	Indian Midland	(*b*) 796·25	
	Great Indian Peninsula	*1,547·63	
	Khamgaon	(*b*) (*b′*) 7·89	6,777·63
	Amraoti	(*b*) (*b′*) 5·72	
	Bhopal-Itarsi (*British section*)	(*b*) 13·21	
	Godhra-Rutlam-Nagda	(*c*) 141·14	
	Bezwada extension	(*d*) 20·58	
	Madras Railway (North-East line)	*(*e*) & (*f*) 497·19	
(ii)	North Western	(*g*) & (*h*)* 3,089·61	
	Oudh and Rohilkhand	*1,037·83	4,397·92
	Eastern Bengal	*279·48	
(iii)	Bombay, Baroda and Central India	(*a′*) 460·90	1,366·25
	Madras	*905·35	
(iv)	Delhi-Umballa-Kalka	(*i*) 162·24	
	Tarkessur	(*i*) 22·23	
	South Behar	(*i*) 78·76	
	Southern Punjab	*(*j*) 423·31	882·21
	Hardwar-Dehra	(*k*) 32·04	
	Tapti Valley	(*e*) 155·48	
	Calcutta Port Commissioners'	7·65	
(v)	Bina-Goona-Baran	(*b*) 145·59	
	Bhopal-Ujjain	(*b*) 113·27	
	Bhopal-Itarsi (*Native state section*)	(*b*) 44·28	
	The Nizam's Guaranteed State	330·13	
	Nagda-Ujjain	(*c*) 34·32	709·89
	Petlad-Cambay (Anand-Tarapur section)	(*c*) 21·50	
	Petlad-Cambay (Tarapur-Cambay section)	(*c*) 10·92	
	Kolar Gold-fields	(*e*) 9·88	
(vi)	Rajpura-Bhatinda	*(*j*) 107·39	
	Jammu and Kashmir (*Native state section*)	(*j*) 15·92	202·93
	Ludhiana-Dhuri-Jakhal	*(*j*) 79·62	
(vii)	Bengal and North-Western—		
	Tirhoot section	*519·10	
	Company's section (*l*)	809·02	
	Rohilkund and Kumaon (Lucknow-Bareilly section)	231·17	
	Rajputana-Malwa	(*c, h & m*) 1,648·36	
	Palanpur-Deesa	(*c*) 17·28	
	Southern Mahratta	*5,042·04	
	Guntakal-Mysore frontier	(*n*) 119·50	
	Mysore section (Southern Mahratta)	*(*n*) 296·22	8,024·29
	Nilgiri	(*e*) & (*o*) 16·90	
	South Indian	*1,123·13	
	Tinnevelly-Quilon (Travancore) (*British section*)	*19·05	
	Tanjore District Board (Mayavaram-Mutupet)	(*o*) 71·11	
	Assam-Bengal	645·95	
	Burma	1,342·10	
	Jodhpur-Hyderabad (*British section*)	(*p*) 123·98	
(viii)	Eastern Bengal—		
	Northern and Behar sections (*including the Kaunia-Dharlla, 2′ 6″ gauge branch, and British section, Cooch Behar-Santrabari extension, 2′ 6″ gauge*)	*533·67	
	Dacca section	85·92	699·09
	Cawnpore-Burhwal (*Metre gauge link*)	(*q*) 79·60	
(ix)	Deoghur	4·79	
	Brahmaputra-Sultanpur	*(*r*) 59·37	
	Mymensingh-Jamalpur-Jagannathganj	(*r*) 53·37	
	Rohilkund and Kumaon (*Company's section*)	53·92	
	Bengal Dooars	36·40	
	Bengal Dooars extensions	*92·76	495·40
	Dibru-Saydia	77·50	
	Ledo and Tikak-Margherita Colliery	(*s*) 11·00	
	Ahmedabad-Parantij	(*o*) 54·70	
	Sagauli-Raxaul	(*t*) 18·09	
	Ahmedabad-Dholka	* (*c*) 33·50	
(x)	Geakwar's Mehsana	(*c*) 92·63	
	Hyderabad-Godavari Valley	(*d*) 391·42	
	Kolhapur	(*n*) 29·27	
	Hindupur (Yesvantpur-Mysore frontier)	(*n*) 51·35	
	Mysore-Nanjangad	*(*n*) 15·80	725·02
	Vijapur-Kalol-Kadi	(*c*) 41·80	
	Shoranur-Cochin	(*e*) 64·83	
	Birur-Shimoga	(*n*) 37·92	
(xi)	Jodhpur-Bikaner	700·29	
	Udaipur-Chitor	67·30	
	Bhavnagar-Gondal-Junagad-Porbandar	*(*u*) 334·19	1,223·04
	Jetalsar-Rajkot	*(*v*) 46·21	
	Jamnagar	*(*v*) & (*w*) 54·22	
	Dhrangadra	(*v*) 20·83	
(xii)	West of India Portuguese	(*n*) 51·11	
	Pondicherry	(*o*) 7·85	73·61
	Karaikal-Peralam	(*o*) 14·65	
(xiii)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—		
	Gondia to Balaghat	25·23	
	Raipur-Dhamtari branch	56·24	81·47
(xiv)	Jorhat (2′ 0″)	30·25	
	Nowshera-Durgai (2′ 6″)	(*f*)40·25	
	Dandot Light (2′ 0″)	(*j*) 6·18	168·88
	Khushalgarh-Kohat-Thal (2′ 6″)	(*f*)92·20	
(xv)	Darjeeling-Himalayan (2′ 0″)	51·00	
	Barsi Light (2′ 6″)	21·59	
	Howrah-Amta (2′ 0″)	28·69	
	Howrah-Sheakhala (2′ 0″)	19·75	
	Ranaghat-Krishnagar (2′ 6″)	20·25	239·76
	Tarakeshwar-Magra (2′ 6″)	31·12	
	Tezpur-Balipára (2′ 6″)	20·10	
	Powayan (2′ 6″)	(*x*) 39·50	
	Thaton-Doyinzaik Light (2′ 6″)	7·76	
(xvi)	Gaekwar's Dabhoi (2′ 6″)	(*c*) 88·00	
	Rajpipla (2′ 6″)	(*c*) 37·37	
	Parlakimedi (2′ 6″)	(*y*) 25·00	276·51
	Gwalior Light (2′ 0″)	(*b*)126·14	
(xvii)	Cooch Behar (2′ 6″)	*(*r*)33·60	
(xviii)	Morvi (2′ 6″)	*93·07	

(*a*) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(*b*) Worked by the Great Indian Peninsula Railway Company.
(*c*) Worked by the Bombay, Baroda and Central India Railway Company.
(*d*) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(*e*) Worked by the Madras Railway Company.
(*f*) Including 2·66 miles laid on a mixed gauge and 0·31 mile on the 3′ 3⅜″ gauge.
(*g*) Including 5·63 miles of military lines not used for public traffic.
(*h*) Including 26·28 miles of mixed gauge (5′ 6″ and 3′ 3⅜″) between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputana-Malwa railways.
(*i*) Worked by the East Indian Railway Company.
(*j*) Worked by the North Western State railway.
(*k*) Worked by the Oudh and Rohilkhand State railway.
(*l*) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
(*m*) Including 2·10 miles at Ujjain and 3·07 miles between Agra East bank and Agra Cantonment laid on the 5′ 6″ gauge.
(*n*) Worked by the Southern Mahratta Railway Company.
(*o*) Worked by the South Indian Railway Company.
(*p*) Worked by the Jodhpur-Bikaner railway.
(*q*) Excluding 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh, but including the length, Bara Bankí to Burhwal, 16·79 miles, and the length over Cawnpore bridge, 0·59 mile, laid on a mixed gauge.
(*r*) Worked by the Eastern Bengal State railway.
(*s*) Worked by the Assam Railways and Trading Company.
(*t*) Worked by the Bengal and North-Western Railway Company.
(*u*) Including* 4·93 miles of Bhavnagar Dock estates and Junagad quarry lines.
(*v*) Worked by the Bhavnagar-Gondal-Junágad-Porbandar railway.
(*w*) Including* 3·93 miles of Bedi Bandar Dock estate siding.
(*x*) Worked by the Rohilkund and Kumaon Railway Company.
(*y*) Worked by the Bengal-Nagpur Railway Company.
(*z*) Purchased by the State with effect from the 1st January 1903.
(*a′*) Includes 39·25 miles between Viramgam and Wadhwan converted from the 5′ 6″ gauge to the 3′ 3⅜″ gauge on the 14th December 1902.
(*b′*) Classed as a State railway in consequence of the lease in perpetuity of the Assigned Districts of Berar to the British Government with effect from the 1st October 1902.

* Correction of mileage.

† Made up as follows :—

Open at the commencement of 1902-03	25,378·34
Add—Opened during 1902-03	1,095·83
	26,474·17
Add—Increase due to correction of mileage	2·09
	26,476·26
Less—Mileage abandoned on the opening of the Moghalhat-Dhubri extension (Kurigram to Jatrapur	5·69
	26,470·57

Appendix A—*continued.*

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Katrasgarh to Khanoodih	7·80		
	Northern half of the Mulkeera-Katrasgarh cross connection	0·71		
	Manpur to Hariharpur	99·79	179·62	
	Jherriah to Dhanbaid	3·75		
	Tasra siding	1·75		
	Shikohabad to Farukhabad	65·82		
	Bengal-Nagpur—			
	Bhojudih to Parthadihi	1·45		
	Bhowra siding	1 50		
	Southern half of the Mulkeera-Katrasgarh cross connection	0·71	31·56	419·39
	Bhojudih to Hariharpur	27·90		
	Indian Midland—			
	Ait to Kunch	...	8·85	
	Madras (North-East line)—			
	Korukkuppettai to Basin Road station ...	...	0·93	
	Agra-Dehli Chord	...	121·16	
	Azhikal-Mangalore extension	...	77·27	
(ii)	North Western—			
	Malakwal to the Karana Hills ...	51·40		
	Junction with the North Western State railway, 12 miles from Quetta to Nushki	82·50	133·90	
	Oudh and Rohilkhand—			
	Allahabad to Fyzabad	94·67		
	Balamau to Madhoganj	14·47	109·14	321·82
	Eastern Bengal—			
	Ranaghat to Moorshedabad	75·00		
	Kankurgachi Chord	2·25		
	Kankurgachi to Canal Junction ...	1·53	78·78	
(iii)	Bombay, Baroda and Central India—			
	Godhra to Baroda	...	...	44·85
(iv)	Southern Punjab—			
	Delhi Brewery to Delhi	...	...	0·79
	Bengal and North-Western—			
	Tirhoot section—			
	Sakri to Jainagarh (*a*)	30·47		
	Company's section—			
	Aunrihar to Jaunpur	36·14	66·61	
	Rohilkund and Kumaon (Lucknow-Bareilly section)—			
	Dudhwa to the Mohan river	...	5·96	
	Rajputana-Malwa—			
	Rewari to Phulera (*a*)	...	133·32	
	Famine lines (Madras Presidency)—			
	Bellary to Rayadrug	33·00		
	Hospet to Kottur	38·10	71·10	
(v)	South Indian—			459·03
	Tiruppachettur to Sivagunga	9·00		
	Saidapet to Madras Beach	8·38	17·38	
	Tinnevelly-Quilon (Travancore) (British section)—			
	Kallidaikurichi to the British frontier near Shencottah	...	31·26	
	Tanjore District Board (Mayavaram-Mutupet)—			
	Pattukottai to Arantangi	28·35		
	Adirampatnam and Thambikkottai salt sidings and Arantangi quarry branch	5·63	33·98	
	Assam-Bengal—			
	Damchara to Lumding	...	99·40	
(vi)	Eastern Bengal—			
	Golokganj to the Brahmaputra opposite Gauhati ...	...	...	151·62
(vii)	Bengal Dooars—			
	Dalma to Hantupara	...	23·80	
	Noakhali (Bengal)—			58·75
	Laksam *viâ* Noakhali to Ichakhali ...	...	34·95	
(viii)	Tinnevelly-Quilon (Travancore) (Native state section)—			
	Quilon to the frontier of the Travancore State near Shencottah			57·94
(ix)	Jaipur—			
	Sanganer to Siwai-Modhopur			72·85
(x)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Balaghat to Jubbulpore	118·20		
	Neinpur to Mandla	21·75	227·44	
	Neinpur to Chindwara	87·49		272·28
	Famine lines (Madras Presidency)—			
	Morappur to Dharmapuri (2′ 6″) ...	18·37		
	Tirupattur to Krishnagiri (2′ 6″) ...	26·47	44·84	
(xi)	Barsi (2′ 0″)—			
	Barsi Road Junction to Pandharpur (*a*) ...	30·67		
	Barsi Town to Tadwala	26·70	57·37	
	Howrah-Amta (2′ 0″)—			
	Jagatbullubpur to Champadanga ...	17·50		
	Antpur to Rajbalhat	3·50	21·00	
	Kalka-Simla (2′ 6″)—			
	Kalka to Simla	...	60·00	
	Dwara-Therria (2′ 6″)—			
	Noorpore to Therria Ghat	...	19·50	394·62
	Bukhtiarpur-Behar (2′ 6″)	...	18·75	
	Madura District Board (2′ 6″)—			
	Ammayanayakkanur to Kotagudi ...	55·00		
	Periyakulam to Krishna-Manaik's Tope...	5·00	93·00	
	Theni to Karuvanath	33·00		
	Shahdara-Saharanpur (2′ 6″)—			
	Shahdara to Saharanpur	95·00		
	Baraut to Meerut	30·00	125·00	
(xii)	Moharbhanj (2′ 6″) (*b*)—			
	Baripada to Baripada Road Station... ...	...	28·50	
	Rewah (2′ 6″)—			
	Rewah to Sutna (*a*)	...	31·81	117·13
	Gwalior (2′ 0″)—			
	Gwalior to Sabulgarh	...	56·82	

And the mileage under construction or sanctioned for construction on the 31st March 1903 will be 2,371·07 miles, made up as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	419·39	
(ii) State lines worked by the State	321·82	
(iii) Guaranteed companies ...	44·85	
(iv) Assisted companies ...	0·79	
		786·85
3′ 3⅜″ gauge—		
(v) State lines worked by companies	459·03	
(vi) State lines worked by the State	151·62	
(vii) Assisted companies ...	58·75	
(viii) Lines owned by native states and worked by companies	57·94	
(ix) Lines owned and worked by native states ...	72·85	
		800·19
Special (2′ 6″ and 2′ 0″) gauges—		
(x) State lines worked by companies	272·28	
(xi) Assisted companies ...	394·62	
(xii) Lines owned by native states and worked by companies	117·13	
		784·03
TOTAL ...		2,371·07

Making a grand total of railways completed and in hand, at the commencement of 1903-1904, of miles ... ... *28,841·64

And showing after allowing for corrections of mileage, an advance on the previous year of miles ... 678·48

(*a*) Commencement of work not yet authorized.
(*b*) Question of working agency not yet finally settled.

* Made up as follows:—

	Miles.
Complete and in hand at the beginning of 1902-1903 ...	28,163·16
Sanctioned during 1902-1903	682·22
	28,845·38
Add—	
Increase due to corrections of mileage	1·95
	28,847·33
Deduct—	
Mileage abandoned on the opening of the Mogalhat-Dhubri extension (Kurigram to Jatrapur)	5·69
	28,841·64

Appendix A—*concluded.*

It is expected that the following lengths of unfinished line will be opened for public traffic in 1903-1904:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	17·67	
(ii) State lines worked by the State	143·40	
(iii) Guaranteed companies ...	44·85	
		205·92
3′ 3⅜″ gauge—		
(iv) State lines worked by companies	164·99	
(v) Lines owned by native states and worked by companies ...	57·94	
		222·93
Special 2′ 6″ gauge—		
(vi) State lines worked by companies	165·33	
(vii) Assisted companies ...	60·00	
		225·33
TOTAL ...		654·18

Leaving the undermentioned lines for completion in 1904-1905 or later:—

	Miles.	Miles.
5′ 6″ gauge—		
(viii) State lines worked by companies	401·72	
(ix) State lines worked by the State	178·42	
(x) Assisted companies ...	0·79	
		580·93
3′ 3⅜″ gauge—		
(xi) State lines worked by companies	294·04	
(xii) State lines worked by the State	151·62	
(xiii) Assisted companies ...	58·75	
(xiv) Lines owned and worked by native states ...	72·85	
		577·26
Special (2′ 6″ and 2′ 0″) gauges—		
(xv) State lines worked by companies	106·95	
(xvi) Assisted companies ...	334·62	
(xvii) Lines owned by native states and worked by companies ...	117·13	
		558·70
TOTAL ...		1,716·89

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Jherriah to Dhanbaid	3·75		
	Katrasgarh to Khanoodih	7·80		
	Tasra siding	1·75	13·01	
	Northern half of the Mulkeera-Katrasgarh cross connection	0·71		
	Bengal-Nagpur—			17·67
	Bhojudih to Parthadihi	1·45		
	Bhowra siding	1·50	3·66	
	Southern half of the Mulkeera-Katrasgarh cross connection	0·71		
(ii)	North Western—			
	Jech Doab line—			
	Malakwal to the Karana Hills		51·40	
	Oudh and Rohilkhand—			146·40
	Phaphamau to Fyzabad		92·00	
(iii)	Bombay, Baroda and Central India—			
	Godhra to Baroda			44·85
(iv)	Rohilkund and Kumaon (Lucknow-Bareilly section)—			
	Dudhwa to the Mohan river		5·96	
	Tinnevelly-Quilon (Travancore) (British section)—			
	Kalidaikurichi to the British frontier near Shencottah		31·28	164·99
	Tanjore District Board (Mayavaram-Mutupet)—			
	Pattukotai to Arantangi		28·35	
	Assam-Bengal—			
	Damchara to Lumding		99·40	
(v)	Tinnevelly-Quilon (Travancore) (Native state section)—			
	Quilon to the frontier of the Travancore State near Shencottah			57·94
(vi)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Balaghat to Jubbulpore		118·20	165·33
	Neinpur to Seoni		47·13	
(vii)	Kalka-Simla (2′ 6″)			60·00
(viii)	East Indian—			
	Manpur to Hariharpur	99·79	165·61	
	Shikohabad to Farukhabad	65·82		
	Bengal-Nagpur—			
	Bhojudih to Hariharpur		27·90	
	Indian Midland—			401·72
	Ait to Kunch		8·85	
	Madras (North-East line)—			
	Kerukkuppattai to Basin Road		0·93	
	Agra-Delhi Chord		121·16	
	Azihkal to Mangalore extension		77·27	
(ix)	North Western—			
	Junction with the North Western State railway, 12 miles from Quetta to Nushki		82·50	
	Oudh and Rohilkhand—			
	Allahabad to Phaphamau	2·67	17·14	178·42
	Balamau to Madhoganj	14·47		
	Eastern Bengal—			
	Ranaghat to Moorshedabad	75·00	78·78	
	Kankurgachi Chord	2·25		
	Kankurgachi to Canal Junction	1·53		
(x)	Southern Punjab—			
	Delhi Brewery to Delhi			0·79
(xi)	Bengal and North-Western—			
	Tirhoot section—			
	Sakri to Jainagar (*a*)	30·47	66·61	
	Company's section—			
	Amrihar to Jaunpur	36·14		
	Rajputana-Malwa—			
	Rewari to Phulera (*a*)		133·32	
	Famine lines (Madras Presidency)—			
	Bellary to Bayadrug	33·00	71·10	294·04
	Hospet to Kottur	38·10		
	South Indian—			
	Tiruppachettu to Sivagunga	9·00	17·38	
	Saidapet to Madras Beach	8·38		
	Tanjore District Board (Mayavaram-Mutupet)—			
	Adirampatuam and Thambikkottai salt sidings and Arantangi quarry branch		5·62	
(xii)	Eastern Bengal—			
	Golokganj to the Brahmaputra, opposite Gauhati			151·62
(xiii)	Noakhali (Bengal)—			
	Laksam *viâ* Noakhali to Ichakhali		34·95	
	Bengal Dooars—			58·75
	Daina to Hantupara		23·80	
(xiv)	Jaipur—			
	Sanganer to Siwai-Madhopur			2·85
(xv)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Neinpur to Mandla	21·75	62·11	
	Seoni to Chindwara	40·36		
	Famine lines (Madras Presidency)—			106·95
	Morappur to Dharmapuri (2′ 6″)	18·37	44·84	
	Tirupattur to Krishnagiri (2′ 6″)	26·47		
	Barsi (2′ 6″)—			
	Barsi Town to Tadwala	26·70	57·37	
	Barsi Road Junction to Pandharpur (*a*)	30·67		
	Howrah-Amta (2′ 0″)—			
	Jagatballubpur to Champadanga	17·50	21·00	
	Antpur to Rajbulhat	3·50		
	Dwara-Therria (2′ 6″)—			
	Noorpore to Therria Ghat		19·50	
(xvi)	Bukhtiarpore-Behar (2′ 6″)		18·75	334·62
	Madura District Board (2′ 6″)—			
	Ammayanayakkanur to Kotagudi	55·00	93·00	
	Periyakulam to Krishna-Manaik's Tope	5·00		
	Theni to Karuvanath	33·00		
	Shahdara-Saharanpur (2′ 6″)—			
	Shahdara to Saharanpur	95·00	125·00	
	Barant to Meerut	30·00		
	Moharbhanj (2′ 6″) (*b*)—			
	Baripada to Baripada Road station		28·50	
(xvii)	Rewah (2′ 6″) (*a*)—			
	Rewah to Sutna		31·81	117·13
	Gwalior (2′ 0″)—			
	Gwalior to Sabulgarh		56·82	

(*a*) Commencement of work not yet sanctioned.
(*b*) Question of working agency not yet finally settled.

ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR THE

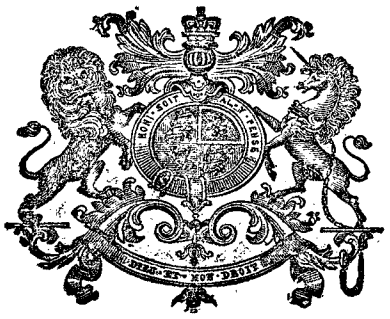
Calendar year 1903

BY

MR. C. W. HODSON, M. INST., C.E.,

FFG. SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT, RAILWAYS.



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INDIAN RAIL[redacted]YS.

Diagram showing for eac[redacted]he totals up to 31st December 1903 for [redacted]l outlay, Gross earnings, Working exp[redacted]nd length in Miles open, also percenta[redacted]Net earnings on Capital outlay an[redacted]entage of Working expenses to Gross ea[redacted].

The figures on this scale represent lakhs for the Capital outlay, tens of thousands for Gross earnings and Working expenses and Miles for length open.

In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.

Percentage of Working expenses to Gross earnings.
Total Capital outlay.
Total Gross earnings.
Total Miles open.
Total Working expenses.
Percentage of Net earnings on Capital outlay
36-01 Crores
*344-62 Crores
26-851 Miles
47-52 per cent
17-11 Crores
5-84 per cent
YEARS
1853 4 5 6 7 8 9 1860 1 2 3 4 5 6 7 8 9 1870 1 2 3 4 5 6 7 8 9 1880 1 2 3 4 5 6 7 8 9 1890 1 2 3 4 5 6 7 8 9 1900 1 2 3 4 5 6 7 8 9 1910

* The decrease is due to revision of the outlay hitherto adopted for lines purchased by the State from Guaranteed Railway Companies.

No. 220, Works, India.—May 04.—1,700.

Litho., S. I. O., Calcutta.

RAILWAY SYSTEM OF INDIA

Corrected up to 30th April 1904

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LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR

THE CALENDAR YEAR 1903.

General.

General. Since the issue of the last report its appendices have been revised with the result that their number has fallen from 50 to 41, and the size of this report, as compared with the last, has been reduced by 107 pages. It is necessary to point out that this has been effected, not by the omission of any statistics, but, by re-arranging and incorporating into one appendix as much information as is possible upon one and the same subject, in order to facilitate reference and comparisons. Under the heading of each appendix will be found the number or numbers of the corresponding appendix or appendices in the last year's report.

Mileage.

Total railway mileage open for traffic. Proprietary distribution of the open mileage of railways—See Appendix 1.

2. At the close of the calendar year 1903 there were 26,955·75 miles of railway open for traffic, 25,611·02 miles in India and 1,344·73 miles in Burma. This mileage—which includes tramways working outside Municipal limits which are treated as Light railways in this report—was owned as follows :

	5′ 6″ gauge.	3′ 3⅜″ gauge.	2′ 6″ gauge.	2′ 0″ gauge.	TOTAL.
	Miles.	Miles.	Miles.	Miles.	Miles.
By the State	11,284·89	7,933·23	299·95	36·43	19,554·50
By Companies guaranteed under—					
(*a*) the old contracts	1,404·26	...	...	...	1,404·26
(*b*) modern contracts	32·04	59·37	...	...	91·41
By District Boards	...	99·46	...	...	99·46
By Branch Line Companies receiving rebates from traffic interchanged with main lines	659·57	175·80	...	...	835·37
By Companies—					
(*a*) subsidized by the Government of India	162·36	53·92	...	...	216·28
(*b*) subsidized by Local Governments	...	77·50	7·76	51·00	136·26
(*c*) subsidized by District Boards	...	36·40	58·85	48·44	143·69
(*d*) receiving land only from the Government of India	22·23	952·40	120·53	...	1,095·16
By unassisted Companies	...	11·00	31·12	...	42·12
By Native States	911·56	1,947·98	277·95	126·14	3,263·63
By Foreign States	...	73·61	...	...	73·61
TOTAL	14,476·91	11,420·67	796·16	262·01	26,955·75

Mileage.

Additions to the open mileage of railways—See Appendix 2.

3. The total length open on the 30th April 1904 was 27,140·24 miles, of which 1,029·15 miles were added during the year 1903, and 184·49 miles in the four months following. The principal additions were:

	Miles.	Gauge.
STATE—		
Bengal-Nagpur railway—		
Nainpur to Seoni	47·26	2′ 6″
Indian Midland railway—		
Ait to Kunch	8·50	5′ 6″
Assam-Bengal railway—		
Damchara to Lumding	96·70	3′ 3⅜″
Tinnevelly-Quilon (Travancore) railway (British section)—		
Kallidaikurichi to Shencotta	30·45	3′ 3⅜″
Oudh and Rohilkhand State railway—		
Fyzabad to Sultanpur	36·37	5′ 6″
Siwait to Phaphamau	3·63	5′ 6″
Balamau to Madhoganj	14·50	5′ 6″
COMPANIES, GUARANTEED UNDER THE OLD CONTRACTS—		
Bombay, Baroda and Central India railway—		
Godhra to Baroda	43·67	5′ 6″
Madras railway—		
Tellicherry to Azhikal	15·72	5′ 6″
DISTRICT BOARD—		
Tanjore District Board railway—		
Pattukkottai to Arantangi	28·35	3′ 3⅜″
BRANCH LINE COMPANY RECEIVING REBATE FROM TRAFFIC INTERCHANGED WITH MAIN LINE—		
Noakhali (Bengal) railway—		
Laksam to Saheb Ghatta	34·90	3′ 3⅜″
SUBSIDIZED BY THE DISTRICT BOARD—		
Bukhtiarpore-Behar Light railway—		
Bukhtiarpore to Behar	18·50	2′ 6″
RECEIVING LAND ONLY FROM THE GOVERNMENT OF INDIA—		
Bengal and North-Western railway—		
Kopaganj to Dohrighat	21·70	3′ 3⅜″
Aunrihar to Jaunpur City	36·14	3′ 3⅜″
Kalka-Simla railway—		
Kalka to Simla	59·44	2′ 6″
NATIVE STATES—		
Gaekwar's Vijapur-Kalol-Kadi railway—		
Kalol to Kadi	11·93	3′ 3⅜″
Gaekwar's Dabhoi railway—		
Padra to Mobha	9·20	2′ ″
Gwalior Light railway—		
Gwalior to Jaura	31·34	2′ 0″

4. During the year 1903 sanction was accorded to the construction of 1,267·20 miles of railway detailed below:

Additions to the sanctioned mileage of railways—See Appendix 4.

	5′ 6″ gauge. Miles.	3′ 3⅜″ gauge. Miles.	2′ 6″ gauge. Miles.	TOTAL. Miles.
OWNED BY THE STATE—				
Bengal-Nagpur railway—				
Jamadhoba to Balliary	5·50	...	...	
Eastern Bengal State railway—				
Murshidabad to Lalgola	22·50	...	...	
Kaunia to Bonarpara	...	44·25	...	
East Indian railway—				
Chandore branch	4·16	...	...	
Ondal to Sainthia	43·62	...	...	
Nilgiri railway—				
Coonoor-Ootacamund	...	11·50	...	
Salem-Attur railway—				
Salem to Attur*	36·06	...	...	
North Western State railway—				
Sargoda to Shorkot Road	103·00	...	...	
Hyderabad to Badin	62·00	...	...	
Jullundur-Kapurthala-Sultanpur railway— (British section)—				
Jullundur to the British Frontier*	...	...	6·80†	
Oudh and Rohilkhand State railway—				
Phaphamau to Zafarabad	57·50	...	...	
Meerut to Hapur	19·50	...	...	
Tirhoot railway—				
Mansi to Baptiahi	...	60·37	...	
Sihursa to Murliganj	...	18·61	...	
Bairagnia to Biknathori	...	79·55	...	
Bettiah to Bagaha	...	49·35	...	
Burma railways—				
Pegu to Martaban*‡	...	121·27	...	
CARRIED OVER	353·84	384·90	6·80	745·54

* Commencement of work not yet authorized.
† Question of gauge not yet settled.
‡ With a steam ferry to connect with the port of Moulmein.

Mileage.

Additions to the sanctioned mileage of railways—See Appendix 4.

	5′ 6″ gauge. Miles.	3′ 3⅜″ gauge. Miles.	2′ 6″ gauge. Miles.	Total. Miles.
Brought forward	353·84	384·90	6·80	745·54
Owned by Branch Line company receiving rebate from traffic interchanged with main line—				
Southern Punjab railway—				
Ludhiana to MacLeodganj	156·40	...	...	156·40
Owned by company subsidized by the Government of India—				
Rohilkund and Kumaon railway—				
Bareilly to Soron	...	56·00	...	
Moradabad to Ramnagar	...	47·00	...	
Lalkua to Kashipur	...	45·00	...	
	...	148·00	...	148·00
Owned by company subsidized by the District Board—				
Baraset-Basirhat Light railway—				
Baraset to Basirhat	...	...	26·00	26·00
Owned by company receiving land only from the Government of India—				
Bengal and North-Western railway—				
Kopaganj to Dohrighat	...	21·70	...	
Uska Bazar to Tulsipur	...	53·54	...	
Gaisanri to Jarwa	...	12·56	...	
Gorakhpur to Bagaha	...	60·94	...	
	...	148·74	...	148·74
Owned by unassisted company—				
Tarakeshwar-Magra railway—				
Magra to Tribeni	...	...	2·15	2·15
Owned by Native States—				
Gaekwar's Dabhoi railway—				
Mobha to Kanjat	...	...	6·49	
Jullundur-Kapurthala-Sultanpur railway (Native state section)—				
Sultanpur to the British Frontier*	...	...	22·03†	
Cutch railway—				
Anjar to Tuna	...	...	11·86	
	...	...	40·37	40·37
Total	510·24	681·64	75·32	1,267·20

An additional 216·38 miles were sanctioned between the 1st January and the 30th April 1904, the details of which are:

	5′ 6″ gauge. Miles.	3′ 3⅜″ gauge. Miles.	2′ 6″ gauge. Miles.	Total. Miles.
Owned by the State—				
East Indian railway—				
Khurja to Hapur	38·87	...	...	
Great Indian Peninsula railway—				
Warora to Bellarpur	37·90	...	...	
Burma railways—				
Henzada to Kyangin	...	65·66	...	
	76·77	65·66	...	142·43
Owned by Native States—				
Jodhpur-Bikaner railway, Jodhpur section—				
Merta Road to Merta City	...	8·95	...	
Gwalior Light railway—				
Sabulgarh to Sheopur	...	...	65·00	
	...	8·95	65·00	73·95
Total	76·77	74·61	65·00	216·38

5. The following is an abstract of the mileage of railways under construction or sanctioned for commencement on the 30th April 1904:

Mileage remaining under construction or sanctioned for commencement—See Appendix 4.

	5′ 6″ gauge. Miles.	3′ 3⅜″ gauge. Miles.	2′ 6″ gauge. Miles.	2′ 0″ gauge. Miles.	Total. Miles.
Owned by the State*	1,065·46	852·98	181·50	...	2,039·94
Owned by District Board	...	5·53	...	...	5·53
Owned by Branch Line Company receiving rebate from traffic interchanged with main line	156·40	...	...	...	156·40
Owned by Company subsidized by the Government of India	...	148·00	...	...	148·00
Owned by Companies subsidized by District Boards	...	...	119·00	21·00	140·00
Owned by Companies receiving land only from the Government of India	...	127·04	201·87	...	328·91
Owned by Native States	...	139·42	72·47	91·52	303·41
Total	1,161·86	1,272·97	574·84	112·52	3,122·19

* Commencement of work not yet authorized.
† Question of gauge not yet settled.

Capital.

Capital outlay—See Appendix 8.

Capital.

6. The total Capital outlay on railways at the close of the calendar year 1903 amounted to Rs. 3,44,59,38,000 as under :

	Mileage.			Capital outlay at close of 1903. (In thousands of rupees).		
	Open.	Under construction.	Total.	Open lines.	Lines under construction.	Total.
PART I.	Miles.	Miles.	Miles.			
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH PASS THROUGH THE GOVERNMENT ACCOUNTS.						
(*i*).—State lines worked by Companies	*14,141·32	939·26	15,080·58	†1,88,36,79	4,84,04	1,93,20,83
(*ii*).—State lines worked by the State	5,370·83	436·24	5,807·07	‡82,31,03	54,29	82,85,32
(*iii*).—Companies' lines guaranteed under the old contracts	1,404·26	3·90	1,408·16	25,19,76	81,66	26,01,42
(*iv*).—Companies' lines guaranteed under modern contracts	91·41	...	91·41	57,86	...	§57,86
(*v*).—District Boards' lines	99·46	3·90	103·36	44,46	1,24	45,70
(*vi*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines	375·14	...	375·14	3,02,07	...	‖3,02,07
TOTAL OPEN LINES AND LINES PARTLY OPEN.	21,482·42	1,383·30	22,865·72	2,99,91,97	6,21,23	3,06,13,20
(*vii*).—Lines wholly under construction by State agency	...	300·10	300·10	...	1,02,68	1,02,68
(*viii*).—Lines wholly under construction by Companies	...	256·69	256·69	...	1,29,49	1,29,49
TOTAL (*vii*) AND (*viii*)	...	556·79	556·79	...	2,32,17	2,32,17
(*ix*).—Unclassified expenditure including collieries, &c.	...	...	...	...	...	95,71
TOTAL PART I	21,482·42	1,940·09	23,422·51	2,99,91,97	8,53,40	3,09,41,08
PART II.						
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH DO NOT PASS THROUGH THE GOVERNMENT ACCOUNTS.						
(*i*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines	460·23	156·40	616·63	2,49,33	...	2,49,33
(*ii*).—Assisted Companies' lines—						
(*a*) Subsidized by the Government of India	**162·36	...	162·86	1,55,50	...	1,55,50
(*b*) Subsidized by Local Governments	††128·50	...	128·50	1,18,46	...	1,18,46
(*c*) Subsidized by District Boards	143·69	8·50	152·19	65,57	20	65,77
(*d*) Receiving land only from Government	1,095·16	123·94	1,219·10	8,77,04	18,33	8,95,37
TOTAL (*ii*)	1,529·71	132·44	1,662·15	12,16,57	18,53	12,35,10
(*iii*).—Unassisted Companies' lines	42·12	2·15	44·27	26,46	·32	26,78
(*iv*).—Native State lines—						
(*a*) Worked by Native States	1,317·40	...	1,317·40	4,42,62	3,31	4,45,93
(*b*) Worked by Companies	‡‡1,710·57	64·35	1,774·92	12,35,93	13,27	12,49,20
(*c*) Worked by State Railway agency	235·23	...	235·23	1,32,92	...	1,32,92
TOTAL (*iv*)	3,263·20	64·35	3,327·55	18,11,47	16,58	18,28,05
(*v*).—Foreign State lines	73·61	...	73·61	1,50,69	....	1,50,69
TOTAL OPEN LINES AND LINES PARTLY OPEN	5,368·87	355·34	5,724·21	34,54,52	35,43	34,89,95
(*vi*).—Lines wholly under construction by private Companies	...	39·50	39·50	...	8,24	8,24
(*vii*).—Lines wholly under construction by Native States	...	116·81	116·81	...	12,03	12,03
TOTAL (*vi*) AND (*vii*)	...	156·31	156·31	...	20,27	20,27
(*viii*).—Unclassified expenditure	...	...	...	...	...	§§8,08
TOTAL PART II	5,368·87	511·65	5,880·52	34,54,52	55,70	35,18,30
GRAND TOTAL	¶26,851·29	2,451·74	29,303·03	3,34,46,49	9,09,10	3,44,59,38
ABSTRACT.						
Outlay on open lines and lines partly open—(*i* to *vi*, Part I) and (*i* to *v*, Part II)	¶26,851·29	1,738·64	28,589·93	3,34,46,49	6,56,66	¶¶ 3,41,03,15
Outlay on lines wholly under construction—(*vii* and *viii*, Part I) and (*vi* and *vii*, Part II)	...	713·10	713·10	...	2,52,44	2,52,44
Unclassified expenditure (*ix*, Part I, and *viii*, Part II)	...	...	...	...	...	1,03,79

* Includes the Rohilkund and Kumaon railway (Company's section) 53·92 miles, which has for convenience been classed as a State line for the purposes of this statement, and 0·43 mile of the Native State section of the Tinnevelly-Quilon (Travancore) railway, but excludes the Damchara-Lumding section of the Assam-Bengal railway, 96·70 miles.

† Excludes Rs. 16,43,01,000 on account of *premia*.

‡ Excludes Rs. 3,90,73,000 on account of *premia*.

§ Includes Rs. 4,01 incurred direct by Companies on the following lines :—

Brahmaputra-Sultanpur	1,83
Hardwar-Dehra	2,18
	4,01

‖ Includes Rs. 68,05 incurred direct by Companies on the following lines :—

Ahmedabad-Dholka	1,42
Ahmedabad-Parantij	1,47
Mymensingh-Jamalpur-Jagannathganj	1,28
South Behar	52,18
Tapti Valley	11,70
	68,05

** Excludes the Rohilkund and Kumaon railway (Company's section), 53·92 miles, which has for convenience been classed as a State line for the purposes of this statement.

†† Excludes the Thaton-Duyinzaik railway, 7·76 miles.

‡‡ Excludes 0·43 mile of the Native State section of the Tinnevelly-Quilon (Travancore) railway, included with "State lines worked by companies."

§§ State outlay on the Patri branch of the Bombay, Baroda and Central India railway.

¶ Excludes the Thaton-Duyinzaik railway, 7·76 miles, and the Damchara-Lumding section of the Assam-Bengal railway, 96·70 miles.

¶¶ Excludes State outlay on the Patri branch, Rs. 8,08,000, included with "Unclassified expenditure."

Capital.

Capital outlay.

The outlay included in Part I of the foregoing statement under "State lines worked by companies" on account of the railways purchased by the State from the East Indian, the South Indian and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bengal, the Sind, Punjab and Delhi and the Oudh and Rohilkhand Guaranteed Railway Companies, represents the actual Capital expenditure incurred by the Companies up to the date of purchase and subsequently by the State.

Average outlay per mile open—See Appendix 8.

7. The average outlay per mile open on the different classes of railways was as under:

	Average outlay per mile open. (In thousands of rupees.)			
	5′ 6″ gauge.	3′ 3⅜″ gauge.	2′ 6″ gauge.	2′ 0″ gauge.
Owned by the State	1,70	36	50	39
Owned by Companies guaranteed under—				
(*a*) the old contracts	1,73	...	...	...
(*b*) modern contracts	89	49	...	...
Owned by District Boards	...	45	...	...
Owned by Branch Line Companies receiving rebates from traffic interchanged with main lines.	73	41	...	...
Owned by Companies—				
(*a*) Subsidized by the Government of India	96	...	...	...
(*b*) Subsidized by Local Governments	...	*1,04	...	67
(*c*) Subsidized by District Boards	...	69	34	39
(*d*) Receiving land only from the Government of India	81	70	†1,32	...
Owned by Unassisted Companies	...	‡1,51	31	...
Owned by Native States	90	44	34	23
Owned by Foreign States	...	§2,02	...	...
AVERAGE COST OF EACH GAUGE	1,60	77	37	35

Distribution of Capital outlay over main heads of expenditure—See Appendix 8.

8. The Capital outlay on each railway up to the 31st December 1903 distributed over main heads of expenditure is recorded in Appendix 8.

Sterling Capital—See Appendix 5.

9. The total Sterling Capital raised by companies and paid over to the Secretary of State up to the close of the calendar year 1903, and the amount subsequently withdrawn for expenditure by companies during and up to the close of the calendar year 1903 were as follows:

	Amount raised up to 31st December 1903.	Amount withdrawn in 1903.	Amount withdrawn up to 31st December 1903.
	£	£	£
Guaranteed railways	22,364,713	240,653	23,195,074
State lines leased to companies	33,558,006	1,786,237	39,559,272
TOTAL	55,922,719	2,026,890	62,754,346

* The high cost is due to the large outlay on the Dibru-Sadiya railway.

† The high cost is due to the large outlay on the Kalka-Simla railway.

‡ Cost of the Ledo and Tikak-Margherita Colliery railway.

§ The high cost is due to the large outlay on the West of India Portuguese railway.

Capital.

Budget allotments for Capital expenditure—See Appendix 6.

10. The total budget allotment for the official year 1902-03 on railways for which the State finds the funds either directly or by guarantee, was originally Rs. 11,00,00,000, but was subsequently reduced to Rs. 10,34,58,000. For the official year 1903-04 it was reduced from Rs. 11,00,00,000, to Rs. 9,82,07,000 owing to short outlay in England against the amounts placed at the disposal of the Secretary of State and some of the Railway Companies' Boards for the purchase of rolling-stock, stores, etc.

For the official year 1904-05, provision has been made as follows :

	Rs.
(*a*) For open lines, including rolling-stock	5,48,67,000
(*b*) For lines already under construction—	
(*i*) Begun prior to 1903-04	3,51,84,000
(*ii*) Begun during 1903-04	1,48,11,000
(*c*) For lines to be begun in 1904-05	* 91,38,000
(*d*) For purchase of lines	60,00,000
TOTAL	12,00,00,000

As usual the needs of open lines and lines already under construction have received first consideration, no less a sum than Rupees three crores having been set aside for additional rolling-stock.

Towards the close of the year 1903-04 Government, at the request of the owners, decided to purchase the Sagauli-Raxaul, the Brahmaputra-Sultanpur, the Cooch Behar, and the Ranaghat-Krishnagar railways at an aggregate cost of about 60 lakhs of rupees. The offer of sale has, in the case of the Cooch Behar railway, since been withdrawn.

Capital expenditure during the past ten years—See Appendix 7.

11. In Appendix 7 is presented the Capital expenditure during the past ten years on each railway system in India on—

(*a*) Rolling-stock.
(*b*) Improvement of existing lines.
(*c*) New lines in extension of, or now worked by, existing lines.

Summarized, the figures are as follows :

	EXPENDITURE *in lakhs* ON LINES WHICH ARE INCLUDED IN THE "RAILWAY PROGRAMME," THAT IS, FOR WHICH THE STATE FINDS OR GUARANTEES THE FUNDS.						EXPENDITURE *in lakhs* ON PRIVATE COMPANIES' LINES OR NATIVE STATES' LINES, WHICH FALL OUTSIDE THE "RAILWAY PROGRAMME."					
Year.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 2+3+4.	New lines in extension of, or now worked by, existing lines.	Total Capital expenditure 5+6.	Total Capital expenditure 12+13.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 9+10+11.	New lines in extension of, or now worked by, existing lines.
1	2	3	4	5	6	7	8	9	10	11	12	13
1894	45	1,83	41	2,69	2,83	5,52	60	...	10	—3	7	53
1895	91	1,10	34	2,35	3,44	5,79	1,66	7	10	22	39	1,27
1896	65	1,42	56	2,63	4,17	6,80	2,38	14	3	30	47	1,91
1897	1,25	1,88	53	3,16	5,56	8,72	3,09	12	11	12	35	2,74
1898	1,20	1,05	—59	1,66	5,45	7,11	3,33	24	17	9	50	2,83
1899	2,25	1,50	—7	3,68	5,72	9,40	3,00	43	10	—8	45	2,55
1900	1,49	1,56	23	3,28	4,15	7,43	1,57	29	13	—13	29	1,28
1901	1,74	1,82	53	4,09	3,73	7,82	1,83	25	29	—2	52	1,31
1902	2,56	2,15	35	5,06	4,88	9,94	1,65	28	20	—6	42	1,23
1903	2,83	1,82	1,31	5,46	4,75	10,21	1,44	30	23	—26	27	1,17

The actual Capital expenditure during the calendar year 1903 on railways for the financing of which the State is responsible amounted to Rs. 10,21,00,000, the gross outlay on all railways in India during the year having been Rs. 11,65,00,000.

* Includes Rs. 66,38,000, unallotted provision for five railways.

Rolling-stock.

Rolling-stock. Statistical results.

12. During the year 1902, 205 engines, 684 passenger carriages, and 5,023 wagons were added to the rolling-stock of railways; in 1903 the figures were 318, 581, and 4,293 respectively. Details of the total stock on each railway system on the 31st December 1903 will be found in Appendix 22.

Rolling-stock—See Appendices 8, 22 and 23.

13. The total outlay on rolling-stock amounted at the close of 1903 to Rs. 50,55,54,000 or Rs. 18,828 per mile open as will be seen from Appendix 8. The additions under supply to meet further developments of traffic are shown at the foot of Appendix 23, and amount to 283 engines, 840 passenger carriages and 5,945 wagons.

Statistics of the work done by the rolling-stock of the principal railways are shown in Appendix 23.

14. During the year 1903, 355 engines, and 873 coaching and 803 goods vehicles were fitted with automatic brakes, making the number so fitted at the close of the same year, 2,360 engines, and 9,732 coaching and 2,008 goods vehicles, as against 3,069 engines, and 9,823 coaching and 101,289 goods vehicles not yet fitted.

Automatic brakes—See Appendix 24.

15. During the year 1903, 1,134 vehicles were fitted with gas and electricity, bringing the total number so fitted at the close of the year up to 9,214, as compared with 8,041 not yet fitted.

Carriages lighted by gas and electricity—See Appendix 25.

16. During the year under review, 99 stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations continues, 109 stations having been provided with these instruments.

Interlocking and block working—See Appendix 26.

Statistical results of working.

17. In the following table will be found some of the more important figures connected with the working of the Indian railways treated as one system :

Main statistical results of working—See Appendices 10, 11, 12, 15 and 16.

Year.	Mileage open.	In thousands of rupees. Capital outlay.	Gross earnings.	Working expenses.	Net earnings.	Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay on open lines and lines partly open.	PASSENGERS. Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile.	Average miles carried.	GOODS. Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile.	Average miles carried
						Rs.					Pies.				Pies.	
1884 .	11,527	1,55,45,04	16,06,62	8,15,62	7,91,00	276	50·76	5·09	73,815	4,46,84	2·56	45·46	16,663	10,56,59	7·35	165·7
1889 .	15,900	2,05,04,61	20,49,37	10,37,74	10,11,63	257	50·64	4·93	110,650	6,13,74	2·52	42·27	22,249	13,05,56	5·88	163·7
1894 .	18,340	2,37,79,01	25,50,89	11,98,40	13,52,49	262	46·98	5·69	145,727	7,57,58	2·56	40·42	32,644	16,24,32	5·42	148·4
1899 .	23,507*	3,08,50,12	29,36,78	13,93,36	15,43,42	246	47·45	5·00	161,720	8,09,39	2·51	38·48	39,748	19,19,82	5·98	155·1
1900 .	24,704†	3,29,53,34	31,54,32	15,09,31	16,45,01	250	47·85	4·99	176,308	8,95,07	2·51	40·09	42,896	20,36,52	5·88	154·9
1901 .	25,332‡	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46·79	5·27	194,749	10,07,47	2·48	40·42	45,392	21,23,67	5·77	152·7
1902 .	25,898‡	3,49,77,34	33,92,69	16,70,49	17,22,20	254	49·24	4·92	196,648	10,27,48	2·51	40·03	45,537	21,23,41	5·68	152·8
1903 .	26,851§	¶3,41,11,23	36,00,82	17,11,09	18,89,73	257	47·52	5·54	210,231	10,98,14	2·51	39·90	47,684	22,41,92	5·64	150·9

With an addition of 953 miles or 3·68 per cent. to the open mileage, the gross earnings exceeded those of the previous year by Rs. 2,08,13,000 or 6·13 per cent. and as this sum was realized at an extra outlay of only Rs. 40,60,000 or 2·43 per cent., the net earnings were greater by Rs. 1,67,53,000 or 9·73 per cent. This gain was derived from both passenger and goods traffic, principally the latter.

The percentage of working expenses to gross earnings was lower by 1·72 and that of net earnings on Capital outlay was higher by 0·62; the latter result being due partly to the change made in the manner of stating the Capital outlay of the railways purchased from Guaranteed Companies by the State, which has been referred to in paragraph 6, pages 4 and 5.

The statistical results of working each railway system will be found in Appendix 12.

* Excludes the Cherra-Companyganj and Thaton-Duyinzaik railways.
† Excludes the Thaton-Duyinzaik and Powayan Light railways.
‡ Excludes the Thaton-Duyinzaik and Parlakimedi Light railways.
§ Excludes the Thaton-Duyinzaik Light railway and the Damchara-Lumding section of the Assam-Bengal railway, 104·46 miles.
¶ The decrease is due to a revised method having been adopted for showing the capital outlay on railways purchased by the State from Guaranteed Railway Companies.

Statistical results.

Gross earnings of all railways—See Appendices 10, 11, 12, 15 and 16.

18. The gross earnings under main heads during the last five years were :

Year.	Mileage open.	In thousands of rupees.					
		Coaching.	Goods.	Electric telegraph.	Sundries.	Steam-boat.	Total.
1899	23,507	9,22,58	19,19,82	8,70	68,51	17,17	29,36,78
1900	24,704	10,26,44	20,36,52	7,93	66,25	17,18	31,54,32
1901	25,332	11,41,88	21,23,67	7,49	71,81	15,53	33,60,38
1902	25,898	11,75,08	21,23,41	7,32	71,06	15,82	33,92,69
1903	26,851	12,54,40	22,41,92	7,84	78,92	17,74	36,00,82

Of the total increase of Rs. 2,08,13,000 in the gross earnings as compared with the previous year, Rs. 73,73,000, or 35·42 per cent. were obtained by the North Western State, Rs. 35,14,000 or 16·88 per cent. by the Great Indian Peninsula railway system, and Rs. 22,28,000 or 10·70 per cent. by the East Indian railway. The earnings of the South Indian, the Bengal and North-Western, the Bengal-Nagpur and the Bombay, Baroda and Central India also improved by Rs. 18,75,000, Rs. 17,65,000, Rs. 13,30,000 and Rs. 12,56,000 respectively, while those of the Rajputana-Malwa railway declined by Rs. 31,30,000.

The gross earnings of each railway system will be found in Appendix 12.

Coaching traffic—See Appendix 15.

19. Details of the coaching traffic of each railway system will be found in Appendix 15, of which the following is a brief summary :

Year.	Number carried in thousands.						Earnings in thousands of rupees.							Average rate charged per mile. Pies.					Average miles carried.				
	Ordinary passengers.				Season and vendors' tickets.	Total.	Ordinary passengers.				Season and vendors' tickets.	Parcels.	Total.										
	1st.	2nd.	Inter.	3rd.			1st.	2nd.	Inter.	3rd.			Including items not detailed.	1st.	2nd.	Inter.	3rd.	Season and vendors' tickets.	1st.	2nd.	Inter.	3rd.	Season and vendors tickets.
1899 .	526	2,352	5,233	140,321	13,288	161,720	31,52	46,97	52,08	6,70,81	8,01	54,26	9,22,58	12·59*	5·32*	3·07*	2·30*	...	71·78*	43·90*	60·56*	37·58*	...
1900 .	521	2,295	5,703	153,954	13,845	176,308	31,83	47,08	56,03	7,51,66	8,47	63,04	10,26,44	12·59*	5·49*	3·11*	2·31*	...	74·65*	44·04*	58·93*	39·16*	...
1901 .	532	2,405	6,670	170,416	14,726	194,749	32,78	52,43	64,39	8,48,25	9,32	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	92·82	76·27	59·94	41·27	8·63
1902 .	563	2,530	6,813	171,716	15,026	196,648	38,57	56,59	67,60	8,54,97	9,75	68,31	11,75,08	12·86	5·21	3·11	2·32	1·41	102·28	82·39	61·30	41·08	8·85
1903 .	594	2,580	7,214	184,292	15,551	210,231	41,56	58,13	71,68	9,16,31	10,46	71,52	12,54,40	13·21	5·54	3·09	2·33	1·48	101·71	78·13	61·64	40·94	8·75
Average.	547	2,430	6,327	164,140	14,467	187,931	35,25	52,24	62,36	8,08,40	9,20	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	88·65	64·94	60·47	40·01	8·74

A marked development of passenger traffic under all classes, principally under the intermediate and third classes, is reported, with a few unimportant exceptions, by railways generally. In numbers carried the South Indian railway leads with an increase (in thousands) of 2,491 and is followed by the Burma, North Western State, Bengal and North-Western, Great Indian Peninsula and East Indian railways, whose figures of increase (in thousands) are 2,055, 1,956, 1,951, 1,872 and 1,027, respectively.

In earnings, the North Western State railway heads the list with an increase of 13 lakhs of rupees; the other more important increases were recorded by the Burma, South Indian, East Indian and Bengal and North-Western railways, and amounted to 10·35, 9·02, 7·70 and 6·35 lakhs of rupees, respectively.

Compared with the previous year, the passenger traffic improved as under—

	Number.	Earnings. Rs.
First class	31,000	2,99,000
Second class	50,000	1,54,000
Intermediate class	4,01,000	4,08,000
Third class	12,576,000	61,34,000
Season tickets	525,000	71,000
Total . .	13,583,000	70,66,000

* Including season and vendors' tickets.

Statistical results.

These very satisfactory results are due principally to the return of the country to prosperous times and in a less degree, to the year having been propitious to natives for marriages and pilgrimages, to the great "Kumbh" festival, which was held at Hardwar, on the Oudh and Rohilkhand State railway, after an interval of 12 years, and to the opening of new lines of railway.

20. Details of the goods traffic of each railway system will be found in Appendix 16, of which the following is a brief summary:

Goods traffic—See Appendix 16.

Year.	Quantity carried in thousands of tons.						Earnings in thousands of rupees.						
	General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores, including coal and material for construction.	Live-stock.	Total.	General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores, including coal and material for construction.	Live-stock.	Rents, Miscellaneous.	Total.
1899 . .	23,902	59	6,221	9,459	107	39,748	16,10,55	13,11	1,80,41	94,12	13,99	7,65	19,19,82
1900 . .	25,548	58	7,309	9,520	161	42,596	16,90,35	13,78	2,11,71	93,32	13,70	8,66	20,36,52
1901 . .	25,458	63	8,249	9,528	94	43,392	17,53,14	14,97	2,35,01	96,41	15,44	8,70	21,23,67
1902 . .	25,840	100	8,634	11,467	76	45,537	17,40,72	21,97	2,26,75	1,14,93	15,13	9,05	21,23,41*
1903 . .	26,202	114	8,566	12,721	82	47,684	18,58,45	23,07	2,29,93	1,13,90	13,07	9,24	22,41,92*
Average	25,390	79	7,676	10,603	104	43,852	17,29,64	17,32	2,16,76	1,02,53	16,27	8,84	20,89,06

The total weight lifted and the earnings therefrom were greater by 2,147,000 tons and Rs. 1,18,51,000 respectively, and as in the case of the passenger traffic, most of the railways record progress in goods traffic.

The principal increases and decreases in earnings were—

Railways.	Earnings in thousands of rupees.			
	1903.	1902.	Increase.	Decrease.
North Western State	2,46,85	2,91,45	55,40	...
Great Indian Peninsula	4,17,35	3,86,46	30,89	...
Bengal-Nagpur	89,57	77,27	12,30	...
Bengal and North-Western	58,21	47,09	11,12	...
East Indian	4,84,51	4,73,75	10,76	...
Bombay, Baroda and Central India	1,15,88	1,06,94	8,94	...
South Indian	56,18	48,84	7,34	...
Madras	98,65	94,73	3,92	...
Oudh and Rohilkhand State	67,45	64,75	2,70	...
Rajputana-Malwa	1,51,72	1,86,32	...	34,60
Eastern Bengal State	1,05,65	1,08,53	...	2,88

21. The classified items which contributed most towards the earnings of the year, and their figures in 1902 are given below:

Principal commodities—See Appendix 17.

	1903.		1902.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Grain and pulse	7,756,318	5,27,71,853	7,539,816	4,88,50,998
Cotton, raw and manufactured	1,594,925	2,49,20,871	1,455,869	2,25,27,624
Coal	8,563,009	2,30,47,386	8,026,590	2,26,76,009
Oil seeds	2,760,849	1,96,12,591	2,356,413	1,65,28,043
Sugar	1,429,865	1,08,55,795	1,378,871	1,07,26,791
Salt	1,609,292	99,37,343	1,616,103	95,15,866

* Excludes Rs. 5,74,000 of the Cawnpore-Burhwal metre gauge link cross traffic earnings included in the foregoing details and taken to credit under "Sundry" earnings of the Oudh and Rohilkhand State railway.

Statistical results.
Principal commodities—*concld.*

The total weight of these six staples amounts to 23,714,258 tons or 68·00 per cent. of the traffic carried for the public, and their earnings were Rs. 14,11,45,839 or 67·01 per cent. of the gross earnings therefrom. These figures in 1902 were 22,373,727 tons (67·55 per cent.) and Rs. 13,08,25,331 (65·77 per cent.). Coal which was second on the list last year has been displaced by cotton.

The principal fluctuations were :

	Increase.		Decrease.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Wheat	608,925	73,28,183	...	...
Oil seeds	404,431	30,84,548	...	...
Cotton, raw and manufactured	139,056	23,93,247	...	...
Other grains	...	...	255,139	20,92,961
Jowar and bajra	...	...	257,239	13,54,862
Jute, raw	...	...	33,550	7,74,959
Rice in the husk	...	...	133,205	7,00,047
Metals	22,614	3,91,160	...	...
Railway plant and rolling-stock	262,208	3,86,837	...	...
Fodder	20,482	3,71,692	...	...
Coal	536,419	3,71,377	...	...
Stone and lime	153,012	3,23,928	...	...

Good crops of wheat, oil seeds and cotton raw, followed by a demand for export, increased the earnings under these three heads by about a crore and a quarter of rupees. Traffic in the lower food stuffs has resumed normal proportions now that traces of the late famine have disappeared. The falling off in jute was due to an unusually brisk movement of the article in the first half of 1902, owing to merchants having held back stocks in the earlier half of that season. The Burma railways account for nearly all the loss under "Rice in the husk" on account of a short crop.

Coal.—During the year 1903 the total output from the collieries in India and Burma amounted, as shown in Appendix 28, to 7,480,589 tons against 7,424,480 tons in 1902. The increase of 56,109 tons was considerably below that of the year 1902 over 1901 owing to the smaller output from the collieries in the Central Provinces, Nizam's territory, Punjab, Kashmir and Burma. The exports of Indian coal to Indian ports rose from 974,602 tons to 1,235,318 tons or by 260,716 tons, while those to ports outside India including Burma fell from 728,316 tons to 723,873 tons or by 4,443 tons. The imports of coal from the United Kingdom fell from 198,574 tons to 133,711 tons or by 64,863 tons, while those from other countries rose from 20,773 tons to 30,429 tons or by 9,656 tons.

The total quantity of Indian coal consumed by railways during the year 1903, increased, as shown in Appendix 27, from 2,091,992 tons to 2,203,889 tons or by 111,897 tons while the amount of foreign coal consumed fell from 21,469 tons to 17,696 tons or by 3,773 tons.

The improvement in the traffic in coal carried by railways was due principally to the increase of 270,605 tons and Rs. 6,85,572 recorded by the Bengal-Nagpur railway, consequent upon the opening of the Midnapur-Jherriah extension. On the East Indian railway, the quantity carried increased by 325,836 tons, but the earnings were less by Rs. 19,269. This result is ascribed to the lowering of rates, which took effect from the 17th August 1902. The earnings of the Nizam's railway suffered by the collapse of certain pits at the Yellandu colliery, while the Madras railway carried less coal to the Kolar Gold-fields in consequence of electric power being utilized from the Cauvery falls.

Statistical results.

Working expenses—See Appendices 10, 11 and 12.

22. The working expenditure on all railways taken collectively is shown in the following table :

Year.	Working expenses in thousands of rupees.	Proportion per cent. of working expenses to gross earnings.	Working expenses excluding steam-boat, per mile worked in rupees.	Working expenses excluding steam-boat, per train-mile in rupees.
1899	13,93,36	47·45	6,055	1·79
1900	15,09,81	47·85	6,204	1·78
1901	15,72,45	46·79	6,179	1·77
1902	16,70,49	49·24	6,472	1·79
1903	17,11,09	47·52	6,371	1·77

Despite an increase of Rs. 40,60,000 in the working expenses, their proportion to gross earnings fell to 47·52 or by 1·72 per cent., as compared with the previous year. The expenditure under main heads of account is given below :

Year.	In thousands of rupees.						
	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses.	Traffic expenses.	General charges.	Steam-boat service.	Special and miscellaneous expenditure.
1899 . .	3,42,50	4,71,44	1,33,98	2,30,68	1,42,38	10,82	61,56
1900 . .	3,61,79	5,26,50	1,39,31	2,49,27	1,47,43	13,04	71,97
1901* . .	3,55,98	5,59,13	1,51,90	2,63,92	1,57,85	10,86	72,37
1902 . .	3,89,67	5,78,85	1,76,38	2,73,70	1,63,70	13,20	74,99
1903* . .	3,88,99	6,11,95	1,52,51	2,92,19	1,68,91	15,21	80,90

The more important fluctuations were—(i) an increase under "Locomotive expenses," occasioned by heavier renewals of engines, principally on the North Western State, the Bombay, Baroda and Central India, the Burma, the South Indian and the Bengal-Nagpur railways, and also by the additional train-mileage run; (ii) an increase under "Traffic expenses," due to the opening of new railways and to the larger traffic handled; and (iii) a decrease under "Carriage and wagon expenses," chiefly on the North Western and Oudh and Rohilkhand State railways, where fewer vehicles than usual were renewed.

The percentage of gross earnings absorbed under the first five heads detailed in the foregoing table and the rates per mile worked, and per train-mile are noted below :

Year.	Maintenance of way, works and stations.			Locomotive expenses.			Carriage and wagon expenses.			Traffic expenses.			General charges.		
	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.
		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
1899 .	11·66	1,499	0·44	16·05	2,064	0·61	4·56	587	0·17	7·85	1,010	0·30	4·85	623	0·18
1900 .	11·47	1,500	0·43	16·69	2,183	0·63	4·42	578	0·17	7·90	1,034	0·30	4·67	611	0·18
1901 .	10·59	1,408	0·40	16·64	2,214	0·63	4·52	601	0·17	7·85	1,044	0·30	4·70	625	0·18
1902 .	11·49	1,522	0·42	17·06	2,261	0·62	5·20	689	0·19	8·07	1,069	0·30	4·83	639	0·18
1903 .	10·89	1,461	0·41	16·99	2,299	0·64	4·24	573	0·16	8·11	1,098	0·30	4·69	635	0·18

In view of the increase in both passenger and goods traffic these results, details of which are to be found in Appendix 12, are very satisfactory.

* Excludes the Powayan Light railway for which details of expenditure under the several departmental heads are not available.

Statistical results.

Fuel consumption—See Appendix 27.

23. The following are the figures of coal and wood consumed by railways during the last five years. The decrease in the use of foreign coal is a satisfactory feature of the statement:

Year.	Foreign coal.	Indian coal.	Wood.
	Tons.	Tons.	Tons.
1899 .	83,939	1,560,204	347,890
1900 .	56,589	1,858,061	340,830
1901 .	13,248	1,956,601	409,150
1902 .	21,469	2,091,992	402,442
1903 .	17,696	2,203,889	497,185

Train, vehicle & ton-mileage—See Appendices 19, 20 and 21.

24. The following table shows the train, vehicle and ton-mileage of coaching and goods traffic:

Year.	Train-mileage. (omitting 000.)				Vehicle-mileage. (omitting 000.)			Ton-mileage. (omitting 000.)		
	Coaching.	Goods.	Mixed.	Total including miscellaneous train mileage.	Coaching.	Goods.	Total.	Coaching.	Goods.	Total.
1899 .	17,039	30,612	26,889	77,207	571,119	1,213,611	1,784,730	6,800,273	15,909,787	22,710,060
1900 .	18,114	34,252	28,827	84,193	612,017	1,323,001	1,935,018	7,326,297	17,231,511	24,557,808
1901 .	19,701	34,274	31,561	88,265	670,834	1,325,839	1,996,673	8,147,469	17,956,732	26,104,201
1902 .	21,708	36,019	31,781	92,527	742,965	1,354,473	2,097,438	8,958,193	18,764,575	27,722,768
1903 .	25,889	36,308	31,438	95,960	781,192	1,385,042	2,166,234	9,687,222	19,677,180	29,364,402

Coaching.—With an increase of 6·91 per cent. in the number of passengers carried and of 8·14 per cent. in the ton-mileage, the train-mileage was greater by 19·26 per cent. This disproportion was in a great measure due to the opening of new lines of railway.

Goods.—With an increase of 4·71 per cent. in the tonnage lifted and of 4·86 per cent. in the ton-mileage, the train-mileage was practically the same, the increase amounting to 0·80 per cent. only, which points to Railway Administrations paying greater attention to the loads of wagons and of trains.

Earnings per mile worked and per train-mile—See Appendices 11 and 12.

25. The following table shows the gross earnings per mile worked and per train-mile for the past five years:

Year.	Per mile worked. Gross earnings, excluding steam-boat, in rupees.			Per train-mile.
	Coaching.	Goods.	Total, including "other earnings" except steam-boat.	*Gross earnings, excluding steam-boat, in rupees.*
1899 .	4,038	8,405	12,788	3·78
1900 .	4,254	8,444	13,007	3·73
1901 .	4,517	8,404	13,236	3·79
1902 .	4,589	8,293	13,188	3·65
1903 .	4,713	8,423	13,461	3·73

The earnings during 1903 both per mile worked and per train-mile show satisfactory increases as compared with the previous year.

Statistical results.

Statistical return of net earnings on Capital outlay.

26. The Statistical return of net earnings on the Capital outlay on open lines and lines partly open of the different classes of railway for the past five years is given below :

		Return per cent. on Capital.				Total.
		5′ 6″ gauge.	3′ 3⅜″ gauge.	2′ 6″ gauge.	2′ 0″ gauge	
Owned by the State	1899	4·98	4·87	...	*	4·95
	1900	4·94	5·20	...	*	5·01
	1901	5·45	4·97	...	*	5·38
	1902	5·01	4·82	...	*	4·96
	1903	6·03	4·78	...	1·51	5·69
Owned by Companies, guaranteed under the old contracts.	1899	5·85	...	...	...	5·85
	1900	5·62	...	...	...	5·62
	1901	5·85	...	...	...	5·85
	1902	5·86	...	...	...	5·86
	1903	5·42	...	...	...	5·42
Owned by Companies, guaranteed under modern contracts.	1899	...	1·02	...	...	1·02
	1900	3·13	3·10	...	...	3·11
	1901	3·80	3·83	...	...	3·81
	1902	4·45	4·53	...	...	4·49
	1903	4·62	4·75	...	...	4·69
Owned by District Boards	1899	...	...	...	...	...
	1900	...	3·69	...	...	3·69
	1901	...	4·22	...	...	4·22
	1902	...	3·84	...	...	3·84
	1903	...	4·58	...	...	4·58
Owned by Branch Line Companies receiving rebates from traffic interchanged with main lines.	1899	2·35	4·44	...	...	2·50
	1900	3·33	6·39	...	...	3·56
	1901	4·29	4·75	...	...	4·32
	1902	3·92	5·02	...	...	4·00
	1903	4·19	3·71	...	...	4·13
Owned by Companies subsidized by the Government of India.	1899	4·93	10·96	...	...	5·67
	1900	4·66	10·41	...	...	5·37
	1901	6·14	9·50	...	...	6·56
	1902	6·29	9·34	...	...	6·69
	1903	6·12	8·51	...	...	6·46
Owned by Companies subsidized by Local Governments.	1899	...	4·35	...	6·32	4·79
	1900	...	4·65	...	8·53	5·48
	1901	...	5·99	...	7·59	5·29
	1902	...	3·99	...	8·88	5·02
	1903	...	5·56	...	9·34	7·38
Owned by Companies subsidized by District Boards.	1899	...	4·51	4·32	6·06	4·96
	1900	...	7·17	4·82	6·60	6·48
	1901	...	6·67	3·11	6·21	5·75
	1902	...	6·47	5·16	6·95	4·65
	1903	...	8·80	4·42	7·87	6·86
Owned by Companies receiving land only from the Government of India.	1899	3·55	5·24	4·75	...	5·34
	1900	9·03	4·71	3·13	...	4·80
	1901	8·81	5·23	4·66	...	5·30
	1902	8·56	4·71	3·41	...	4·77
	1903	9·13	5·73	0·58†	...	4·85
Owned by Unassisted Companies	1899	...	1·72	1·27	...	1·52
	1900	...	1·40	2·18	...	1·73
	1901	...	0·68	2·55	...	1·38
	1902	...	0·03	2·54	...	0·96
	1903	...	*	2·50	...	0·64
Owned by Native States	1899	4·72	4·03	4·23	...	4·32
	1900	5·72	4·35	3·84	...	4·90
	1901	4·93	3·87	3·75	...	4·31
	1902	5·21	3·67	3·58	0·33	4·29
	1903	4·38	4·21	2·74	1·63	4·38
Owned by Foreign States	1899	...	1·11	...	...	1·11
	1900	...	*	...	...	*
	1901	...	*	...	...	*
	1902	...	0·59	...	...	0·59
	1903	...	1·43	...	...	1·43

In the foregoing paragraphs are recorded the statistical results of the working of railways. The Capital outlay on which the calculations have been based is the sum actually expended in the construction of the several railways and on lines partly open; no account having been taken of *premia* in the purchase of railways by the State and of other special items of Capital expenditure. The net earnings have been arrived at by deduction from gross earnings of the expenses incurred in the maintenance and working of the lines; no deduction having been made of interest on Capital outlay and other charges met from the Revenue derived by railways.

* The working expenses exceeded the gross earnings in this year.
† Due to the comparatively large outlay on the Kalka-Simla railway.

Financial results.

Financial results to the State.

Financial results to the State.

27. The financial result of the working of the State and Guaranteed railways for the year 1903 was a net gain to the State of Rs. 1,33,61,222, the largest yet obtained in any year, after meeting, in addition to the expenses of working, all charges for interest on Capital outlay by the State and on Capital raised by Companies, and also the annuity payments for railways purchased by the State, including both interest and the portion that represents redemption of Capital. This is the fourth year in succession in which there has been a surplus.

In the subjoined table, which gives details of the charges against Revenue for the year 1903 in comparison with the two preceding years, the ordinary interest charges are first deducted, and on this basis, *i.e.*, after excluding the portion of the annuity payments representing redemption of Capital, the surplus to the State for the year 1903 amounts to Rs. 2,28,26,177. It is to be noted that even this understates the real surplus derived from the railways open to traffic, as the interest charges include the interest on outlay on lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the Capital account.

The results for the two old Guaranteed railways, the Bombay, Baroda and Central India and the Madras railways, are shown in a separate column in this table in order to bring out the unfavourable effect to the State of the higher rate of guaranteed interest (5 per cent.) paid on nearly the whole Share Capital of these lines. On these two railways there was a loss to the State of over 31 lakhs of rupees.

	1901.			1902.			1903.		
	State railways.	Guaranteed railways.	Total.	State railways.	Guaranteed railways.	Total.	State railways.	Guaranteed railways.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
REVENUE.									
Gross traffic earnings.—State railways	27,32,42,003	...	27,32,42,003	28,08,52,109	...	28,08,52,109	29,80,67,796	...	29,80,67,796
Gross traffic earnings.—Guaranteed railways	...	2,74,25,599	2,74,25,599	...	2,75,84,610	2,75,84,610	...	2,95,84,050	2,95,84,050
Repayment of advances of interest.—Subsidized railways	4,61,226	...	4,61,226	7,63,462	...	7,63,462	6,24,961	...	6,24,961
Total Revenue	27,37,03,229	2,74,25,599	30,61,28,828	28,16,15,571	2,75,84,610	30,92,00,181	29,86,92,757	2,95,84,050	32,82,76,807
EXPENDITURE.									
Working expenses.—State railways	12,99,04,013	...	12,99,04,013	13,79,71,192	...	13,79,71,192	14,07,14,217	...	14,07,14,217
Working expenses.—Guaranteed railways	...	1,28,86,207	1,28,86,207	...	1,38,55,568	1,38,55,568	...	1,55,20,985	1,55,20,985
Share of surplus profits paid to Companies.—Guaranteed railways	...	18,11,890	18,11,890	...	12,93,644	12,93,644	...	15,12,518	15,12,518
Share of surplus profits paid to Companies.—State railways	42,52,162	...	42,52,162	37,56,601	...	37,56,601	40,20,925	...	40,20,925
Land and Supervision charges.—Guaranteed railways	...	—1,94,361	—1,94,361	...	—95,692	—95,692	...	—1,790	—1,790
Land and subsidy charges.—	1,24,761	...	1,24,761	6,94,486	...	6,94,486	3,04,446	...	3,04,446
Miscellaneous railway expenditure.—	6,98,052	...	6,98,052	10,55,292	...	10,55,292	10,07,603	...	10,07,603
Total Expenditure	13,49,78,988	1,45,03,736	14,94,82,724	14,34,77,771	1,50,53,520	15,85,31,291	14,60,47,191	1,70,31,713	16,30,78,904
Net Revenue	14,37,24,241	1,29,21,863	15,66,46,104	13,81,37,800	1,25,31,090	15,06,68,890	15,26,45,566	1,25,52,337	16,51,97,903
ORDINARY INTEREST CHARGES.									
Interest on Capital outlay.—State railways	4,49,54,370	...	4,49,54,370	4,72,80,834	...	4,72,80,834	4,92,56,942	...	4,92,56,942
Interest on debt for purchase of railways	1,78,32,478	...	1,78,32,478	1,79,05,187	...	1,79,05,187	1,77,70,974	...	1,77,70,974
Interest on advances of Capital to Companies	60,95,434	...	60,95,434	54,29,993	...	54,29,993	59,82,593	...	59,82,593
Interest on Capital raised by Companies	1,59,35,322	...	1,59,35,322	1,74,68,954	...	1,74,68,954	1,80,73,955	...	1,80,73,955
Portion of annuities in purchase of railways representing interest on Capital	3,60,88,503	...	3,60,88,503	3,58,07,457	...	3,58,07,457	3,55,87,560	...	3,55,87,560
Interest on Capital of Guaranteed Companies	...	1,53,20,302	1,53,20,302	...	1,55,69,751	1,55,69,751	...	1,56,99,702	1,56,99,702
Total Interest	12,09,06,107	1,53,20,302	13,62,26,409	12,38,93,425	1,55,69,751	13,94,62,176	12,66,72,024	1,56,99,702	14,23,71,726
Surplus of net Revenue over Interest	2,28,18,134	—23,98,439	2,04,19,695	1,42,45,375	—30,38,661	1,12,06,714	2,59,73,542	—31,47,365	2,28,26,177
Portion of annuity payments representing redemption of Capital also charged against Revenue	88,78,497	...	88,78,497	91,65,078	...	91,65,078	94,64,955	...	94,64,955
Actual net gain +, or loss —	+1,39,39,637	—23,98,439	+1,15,41,198	+50,80,297	—30,38,661	+20,41,636	+1,65,08,587	—31,47,365	+1,33,61,222

Capital liability of the State—See Appendix 9.

28. As regards an account of the Capital liability in connection with railways owned by the State, there are some complications in stating the amount owing to the fact that in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases, it seems correct to deduct from the original commuted Capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the Capital liability at the end of 1903 on account of all railways classed as State railways; the State outlay, as recorded in rupees in the accounts being converted into sterling at the rate of Rs. 15=£1. The total Capital amounts to £234,544,972 (the details by railways being shown in Appendix 9); and on this the net revenue of the State railways for 1903, as shown in the statement in paragraph 27, £10,176,371 (Rs. 15,26,45,566), gave a return of 4·34 per cent. The total Capital of the two old Guaranteed railways amounts to £23,161,594, as per details below, and on this the net earnings of these railways for 1903, £836,823 (Rs. 1,25,52,337) gave a return of 3·61 per cent.

Capital liability on account of railways classed as State railways at end of 1903.

1. Share Capital of purchased railways being paid off by annuities :—

	£	£
Commuted value of stock purchased	35,010,259	
Less—		
Amount redeemed by annuity payments ...	5,081,677	
Unredeemed Capital in respect of annuities purchased by creation of debt (liability included under item 3)	11,797,768	
Great Indian Peninsula railway annuity exchanged for new stock of that railway (liability included under item 5)	1,750,000	
	18,629,445	66,380,814
2. State outlay		83,986,124
3. Debt incurred for purchase of railways		34,422,430
4. Capital advanced by Government to Companies		12,446,901
5. Capital raised by Companies on the Secretary of State's guarantee (including overdrafts of Capital)		37,308,653
TOTAL CAPITAL LIABILITY ...		234,544,972

Capital liability on account of Guaranteed railways at end of 1903.

Capital raised on the Secretary of State's guarantee, including overdrafts :—

	£	£
Madras railway	12,282,625	
Bombay, Baroda and Central India railway ...	10,878,969	23,161,594

Chief events.

Chief events of the year.

29. The chief events of the year are recorded below :

General.—The railway from Mettupalaiyam to Coonoor, 16·90 miles, was purchased by the State from the Nilgiri Railway Company with effect from the 1st January 1903. The working of the line continues in the hands of the Madras Railway Company.

From the 3rd March 1903, the Tinsukia junction station of the Assam Railways and Trading Company was made over to the Assam-Bengal Railway Company for joint working and through booking was introduced between the Dibru-Sadiya and Assam-Bengal railways.

Chief events.

Chief events—*contd.*

During the first-half of 1903 the jetties at Chittagong were transferred to the Assam-Bengal Railway Company on certain conditions.

From the 15th November 1903, arrangements were made with the Bombay Steam Navigation Company for the through booking of goods between stations on the Morvi railway and the Bombay harbour *viâ* Navlakhi out-agency.

Contracts executed for the construction and working of railways.—On the 1st July 1901 and the 6th November 1902, Indentures were executed for the working and maintenance of the Powayan Steam tramway by the Rohilkund and Kumaon Railway Company.

On the $\frac{16th}{23rd}$ December 1901, an agreement was entered into between the East Indian Railway Company and the Administration of the Oudh and Rohilkhand State railway, for the exercise of running powers by trains of the Oudh and Rohilkhand State railway over the Ghaziabad-Delhi section of the East Indian railway and for the interchange of traffic at Ghaziabad.

On the 26th August 1902, an Indenture was executed with the Barsi Light Railway Company for the construction, maintenance and working of the Barsi Junction-Pandharpur and Barsi Town-Tadwalla extensions of the Barsi Light railway.

On the $\frac{6th}{10th}$ October 1902, an agreement was entered into between the Administration of the North Western State railway and the Bombay, Baroda and Central India Railway Company, for the working by the former of the joint stations, Goniana, Jaitu and Kotkapura on the Bhatinda-Kotkapura section of the Rajputana-Malwa railway.

On the 31st December 1902, an Indenture was executed for the working by the Madras Railway Company of the Madras-Vizagapatam section of the East Coast State railway.

On the 15th January 1903, an Indenture was executed for the construction and working by the Bengal and North-Western Railway Company of the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur extensions.

On the 15th June 1903, a revised agreement was executed for the working of the Cooch Behar railway by the Administration of the Eastern Bengal State railway.

On the 23rd November 1903, an agreement was entered into between the Government of His Highness the Maharaja Gaekwar and the Bombay, Baroda and Central India Railway Company for the working by the latter of the Vijapur-Kalol-Kadi railway.

On the 30th December 1903, an Indenture was executed for the construction and working by the Madras Railway Company of the Azhikal-Mangalore State railway.

Report on the working of Indian railways.—Mr. T. Robertson, C.V.O., who had been appointed by His Majesty's Secretary of State for India—

(i) to enquire into and report upon the administration and working of Indian railways, whether controlled by the State or by Companies, with special reference to the system under which they should be managed in India in the future;

(ii) to report upon the feasibility of a systematic plan of railway development in India, to be worked up to by the Government over a series of years;

(iii) to advise as to the management and development of the traffic, the convenience of the public, and the improvement of the revenue;

(iv) generally to make such suggestions as he may think useful for any or all of these purposes, including the extension of branches and light railways as feeders of the main lines;

has submitted his report, which has been forwarded to the Secretary of State with the views and proposals of the Government of India.

Indian Railway Conference Association.—In February 1902, a Conference was held at Calcutta at which it was proposed to form a "Chamber of Indian Railways," or a Conference independent of Government. Rules defining the functions of the

Chief events—contd.

proposed Chamber were framed and submitted to the Boards of Directors of the several Railway Companies, who, at a meeting held in London in May 1903, agreed to the formation of an "Indian Railway Conference Association," independent of Government with powers to—

(i) elect annually a President from the representatives of the railway administrations composing it;

(ii) appoint a paid Secretary with the necessary office establishment;

(iii) (*a*) frame, by general agreement, regulations for the management of traffic interchanged between the railways, parties to the Association, subject to certain fundamental rules which were approved at that meeting;

(*b*) consider questions, submitted for opinion by the Government of India or by any railways represented in the Association, on matters not falling within the provisions of the railways' contracts with the Secretary of State; and

(*c*) act as a Board of conciliation between its members.

Representatives of the several railways, parties to the original Railway Traffic Conference, accordingly assembled at Simla in October 1903 and formed the "Indian Railway Conference Association." Proposals to extend the functions of the Association were framed, and submitted for approval to the Boards of Directors but have not been accepted.

Rate for conversion of sterling.—With effect from the 1st January 1903, the undermentioned Railway Companies have agreed to adopt the fixed rate of Rs. 15=£1, in lieu of the varying half-yearly rates prescribed in certain clauses of their contracts, for the purposes of converting sterling payments in England into Indian currency and also for the rates at which Capital raised in England has to be converted into rupees in the Indian accounts—

Assam-Bengal, Bengal Central, Bengal-Nagpur, Burma, Indian Midland, Southern Mahratta, Rohilkund and Kumaon (for working the Lucknow-Bareilly railway), Bengal and North-Western (for working the Tirhoot railway), East Indian, Great Indian Peninsula, South Indian, Bombay, Baroda and Central India, Madras (for extensions), Delhi-Umballa-Kalka, Southern Punjab, South Behar, Bengal-Dooars, Barsi Light, and Noakhali (Bengal) Railway Companies.

Comforts of lower class passengers.—A representative public meeting was held at Lucknow on the 1st December 1903, to consider the best means of ensuring the convenience and comfort of lower class passengers travelling on the Oudh and Rohilkhand State railway, and steps are being taken to give effect, as far as possible, to the resolutions which were framed.

Ambulance institutions to aid passengers wounded in railway accidents.—During the year, ambulance classes were held at Trichinopoly, and 15 employés of the South Indian Railway Company obtained the St. John's Ambulance Association certificates. An ambulance corps has been started on the Oudh and Rohilkhand State railway.

Standardization of locomotives.—In connection with the question of the relaxation of the existing standard dimensions for Indian railways as regards fixed and moving dimensions, and regulations regarding the strength of bridges and the axle loads and weight of rolling-stock, the Government of India have issued revised rules for the design and inspection of railway girder bridges and for the corresponding amendments to the standard dimensions.

The Government of India have also received from the Secretary of State, standard designs by the English Engineering Standards Committee for a passenger and a goods 5′ 6″ gauge engine, and standard designs for a passenger, a mixed, and a heavy goods 3′3⅜″ gauge engine, and these are under consideration.

Visit of Mr. Grant Burls, Director General of Stores, India Office, to India.—At the invitation of the Government of India Mr. Grant Burls was deputed to India, where he arrived in September 1903, to confer with the authorities in this country on the subject of ensuring a regular and timely supply of the stores required through the Stores Department of the India Office.

Chief events. Important works completed.

Chief events—*concld.*

Coal loading depôt at Luff Point.—In November 1903 a Commission was appointed by the Government of India to enquire into and advise upon the proposal for the establishment of a loading depôt at Luff Point on the right bank of the Hooghly river for the accommodation and shipment of coal. The report has been received and is under consideration.

North and South line connecting Ceylon and Upper India.—The Commission which, under the orders of the Government of India, assembled in Madras in February 1903, to collect evidence and information with a view to advising Government in regard to the best means of effecting a 5′ 6″ gauge connection between the Indian system of 5′ 6″ gauge railways and the Ceylon railways on the same gauge, and to report on certain connected questions, has submitted its report, upon which it has been decided that immediate action is not necessary. A project for extending the Pamban branch of the South Indian railway on to Ramesvaram, and for making a ship canal through the island and establishing a coaling station there and a similar ferry service across Palk Strait to Ceylon has, however, been prepared, and is under consideration.

Branch or feeder line terms.—The question of the general revision of the terms for the construction, outside the Government of India "Programme," of branch or feeder lines of railway by private enterprise, is in abeyance pending the consideration of the proposals made by Mr. Robertson, C.V.O., in his report on the working of Indian railways.

Construction of feeder lines by Local Boards.—Local Boards are permitted to devote surplus funds to the promotion of railways or other public works within their districts. To meet the wants of Boards, whose revenue and expenditure balance, the Madras Government, with the concurrence of the Government of India, have authorized Boards to levy a special cess of three pies in the rupee on the assessment of all occupied lands, provided the money so obtained is expended on the construction of railways or tramways. To further assist Local Boards in such enterprise, the Government of India are prepared to advance, on the security of this special cess, such funds as may be necessary in cases where the Boards are unable to raise all the money required. It is to be hoped that other Local Governments will follow the example set by the Government of Madras. For further particulars see Appendix C, pages 325 to 330.

Important works completed.

Important works completed.

30. The following works of importance were completed during the year 1903:

Bengal-Nagpur railway.

The Damoodur bridge (5 spans of 150-foot, one of 140-foot and one of 40-foot girders) between Bhojudih and Bhaga on the 20th April 1903.

Bombay, Baroda and Central India railway.

The extension of the locomotive shops at Parel; and the protective works at the Nerbudda bridge (25 spans of 180½-foot girders) between Anklesvar and Broach.

East Indian railway.

The new stations at Chinsura and Belur; the Howrah fore-shore wall in front of the joint passenger station with the Bengal-Nagpur railway; the levelling of the Cawnpore (Collectorgunge) station yard; and the renewal of fencing on the Loop line.

Great Indian Peninsula railway system.

The new foot overbridge at the Masjid station; the new local goods shed at Dadar station; and on the Bhopal-Itarsi railway, the relaying of 51 miles of line with 80 lb steel rails and cast iron bowl sleepers.

North Western State railway.

The cableway across the river Indus at Khushalgarh on the 1st April 1903; and the roadway and footways of the bridge over the Kabul river at Nowshera on the 1st December 1903.

Assam-Bengal railway.

The Dehing bridge (7 spans of 150-foot girders) between Naharkatiya and Bordubi Road on the 11th May 1903; and tunnels No. 7 and 10 (845 and 526 feet) between Harangajao and Jatinga and Haflong and Mahur respectively in March 1903, No. 2 (518 feet), No. 1 (1,923 feet), No. 4 (860 feet) between Mahur and Maibang in July, September and November 1903 respectively.

Bengal and North-Western railway.

The workshop at Gorakhpur for building wagons.

Kalka-Simla railway.

The Tara Devi tunnel No. 1 (1,598 feet) and the Inverarm tunnel (1,125 feet) in September 1903, and the Koti tunnel No. 1 (2,280 feet) in October 1903.

Bridges and tunnels.—See Appendices 36 and 37.

31. Appendices 36 and 37 contain particulars of some of the important railway bridges and tunnels open for traffic on the 31st December 1903.

Accidents.

32. The following is a statement of accidents of all descriptions to persons which have occurred during the last five years:

Accidents of all descriptions—See also Appendix 30.

Year.	Passengers.						Servants.						Other persons.										Total all classes.	
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		Whilst passing over railways at level crossings.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.		Total.			
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1899.	7	86	60	191	67	277	20	92	182	339	202	431	21	10	445	149	103	6	25	23	594	188	863	896
1900.	14	85	83	258	97	343	21	84	236	384	257	468	32	17	698	236	164	8	17	35	911	296	1,265	1,107
1901.	3	47	91	251	94	298	14	83	261	375	275	458	41	17	542	170	129	9	33	18	745	214	1,114	970
1902.	127	184	98	289	225	473	37	95	269	364	306	459	29	16	542	162	108	5	21	26	700	209	1,231	1,141
1903.	49	117	93	331	142	448	15	93	275	390	290	485	28	10	510	172	138	5	35	22	711	209	1,143	1,142

33. The following are particulars of the more serious train accidents:

Train accidents.

Bengal-Nagpur railway.

Nos. 15 down passenger and 80 up goods trains collided at mile 533-9 between Sini and Gomharria on the 27th December 1903, owing to the driver of the goods train having started on an incomplete conditional line clear ticket from Gomharria. Both the engines and 5 carriages were smashed, 12 passengers and 3 railway servants killed, and 9 passengers and 6 railway servants injured.

North Western State railway.

Nos. 139 up and 140 down goods trains collided at mile 118·22 between Hyderabad and Rahoki flag stations, on the 8th June 1903, owing to carelessness on the part of the assistant station master at Hyderabad. The rolling-stock and permanent-way were seriously damaged, and 4 firemen injured.

Nos. 13 up mixed and 110 down goods trains collided at Sukheke station on the 13th June 1903, owing to the driver of the goods train having run against signals while the mixed train was entering the loop or station line. The rolling-stock was considerably damaged, and eleven passengers were killed and seven injured.

Bengal and North-Western railway.

Nos. 119 up goods and 6 down mixed trains collided at mile 1·18 between Sonepore and Bunwarchak stations on the 12th June 1903, owing to the assistant station master and signaller having allowed the goods train to leave Sonepore after the mixed train had left Bunwarchak. Three 3rd class carriages, one horse-box, one brake van and one covered goods wagon, belonging to the mixed train, were wrecked; sixteen passengers and the brakesman of the mixed train were killed, and twenty-five, of whom one subsequently died, were injured.

Rohilkund and Kumaon railway.

No. 8 down train parted between Mariaon and Bakhshi-ka-talab stations on the 21st April 1903, owing to the draw-bar of the leading coupling of a 3rd class carriage breaking. The front portion of the train stopped at Bakhshi-ka-talab station and the rear portion crashed into it. The rolling-stock was damaged, two 3rd class passengers were killed and ten others injured.

Damages by floods and rainfall.

Damages by floods and rainfall.

34. The following are particulars of the more serious damages by floods and rainfall :

Bombay, Baroda and Central India railway system.

On the 25th July, owing to heavy rainfall, 600 feet of the earth embankments at mile 10 on the Patri branch were washed away, necessitating transhipment. Through communication was restored on the 28th of the month.

On the 10th October, owing to very heavy rainfall, the line sank considerably at mile 77·5, between Fatehgarh and Kamalganj, on the Cawnpore-Achnera section of the Rajputana-Malwa railway, and caused the derailment of the engine and ten wagons of 64 Down train, the rolling-stock sustaining serious damage. Through communication was restored after 16 hours.

On the 25th July, the line at mile 455·20, between Indore and Palia, was completely washed away for a distance of 250 feet, owing to a tank having burst about 2 miles to the west of the line. No. 44 Down train ran into the breach, resulting in the derailment of and damage to the engine tender and eight wagons. A diversion was put in and communication restored in 11 hours.

Eastern Bengal State railway system.

Owing to an overflow of the Kosi river, the 3′ $3\frac{3}{8}$″ gauge line between Debiganj and Ancharaghat, 6·25 miles, on the Behar section, which had been damaged by floods during 1902, was rendered unsafe and closed to traffic on the 27th June 1903. Subsequently the south approach of the Ferriani bridge and other portions of the line were breached and damaged. Two channels of the Kosi, discharging about half its full contents, now flow permanently through the section—(i) at the Khoradhar bridge (6 spans of 40 feet) where two piers have been overturned and one span washed away, and (ii) through the embankment south of the Ferriani bridge. It has been decided to abandon this section of line.

On the 6th July, a part of the north approach of the Balla bridge on the Cooch Behar railway, measuring about 150 feet, was washed away by floods from the Balla river. On the following day the slope of the bank and the part of the core were also washed away, necessitating slewing of the line. Traffic was stopped on the 6th July 1903 and resumed on the 12th of the month over a diversion.

Madras railway system.

Owing to the breaching of several large tanks on the Mysore Plateau, the Palar river spilled its banks on the 12th November, seriously damaging the works, permanent-way and bridges at Mailpatti station and its neighbourhood, on the South-West line. Through traffic was restored on the 30th of the month.

On the 7th and 8th November, a cyclonic storm burst over the Nellore district seriously damaging the works, permanent-way and approaches to six bridges on the North-East line (East Coast State railway) between miles 119 and 195.

Nizam's Guaranteed State railway system.

On the 28th July, owing to floods caused by heavy rainfall and the breaching of adjacent tanks, the line was breached between Ghanapur and Raghunathpalli, Kazipet and Warangal, and Nekonda and Chintalapalli on the Nizam's Guaranteed State railway, interrupting through communication till the 8th August.

On the 28th July, owing to heavy rainfall and the breaching of adjacent tanks, the line was breached at several places between Ranjani and Koalla on the Hyderabad-Godavari Valley railway. No. 33 Up Mixed train ran into a breach, resulting in three wagons being capsized and one being derailed. Through communication was restored on the 14th August.

On the 17th September, owing to heavy rainfall, the line was breached in several places between Khammameth and Ghanapur on the Nizam's Guaranteed State railway, and a bridge at mileage 191 was badly damaged, necessitating transhipment. Through communication was restored on the 18th October.

North Western State railway system.

On the 23rd July, the line near points No. 1, in the Kathala station yard, and on the following day, the line at mile $\frac{8}{10}\frac{8}{-}\frac{8}{11}$ near Haripur Band, between Kathala and Wazirabad, were breached by floods from the river Chenab. The passage of trains was rendered unsafe and transhipment resorted to. Through communication was restored on the 27th of the month.

Damages by floods and rainfall.

Damages by floods and rainfall—*concld.*

On the 14th August, one pier of the Badli Jumna bridge between Sarsawa and Jagadhri was washed away and the line breached by heavy floods, causing interruption of traffic. A pathway across the break, extending about a quarter of a mile, was completed on the 16th August and arrangements made for transhipment. A diversion was put in and opened on the 23rd of the month.

On the 10th and 11th September, a succession of breaches occurred through heavy rainfall between Khushalgarh West and Thal in which the Shega bridge, between Chikarkot and Raisan stations, was washed away. A diversion was put in and opened on the 17th of the month.

Oudh and Rohilkhand State railway system.

On the 26th and 27th August, owing to very heavy rainfall in the district to the east of Lucknow, the chord line was breached in several places, necessitating the closing of the line from the 27th August to 11th September, and the diversion of traffic *viâ* the loop line.

On the 11th and 12th August, owing to heavy rainfall, the Sukrao nulla overflowed its banks and breached the Kotdwara branch, necessitating the transhipment of traffic till the 16th of the month.

Assam-Bengal railway.

On the 21st June, owing to heavy rainfall, the embankments of the Noakhali (Bengal) Branch railway subsided, necessitating the suspension of traffic from that date to the 24th June, and from the 28th of that month to the 1st July 1903.

Bengal and North-Western railway system.

On the 14th August, floods from the Sikhrana river breached the Sagauli-Raxaul Branch railway at diversions in three places, and interrupted traffic from the 14th August to the 14th September.

Burma railways system.

A heavy rise of the Irrawaddy river at the end of August, combined with continuous heavy rainfall, resulted in impounding flood water to depths varying from 8 to 16 feet against the railway embankment on the Tharrawaw branch at mile 84-B, between Letpadan and Gamonzeik. This condition continued till the 15th September, when a pier on well foundations of the bridge at mile 84/11-B (9 spans of 40-foot girders) was undercut and collapsed, dropping the girders of the 7th and 8th spans. Goods traffic in wagon loads was stopped, but arrangements were made for the transhipment of passengers and light goods. A diversion was put in and through traffic resumed on the 18th November.

On the 1st September, the banks at miles 530 and $\frac{525}{14}$ on the Lashio branch, between Se-en and Manpwe, sank very considerably, necessitating the closing of the line to traffic till the 6th November, when through traffic was resumed.

On the 19th September, the bank at mile $\frac{168}{16}$-B on the Bassein branch, between Gon Min and Daga, was breached. Trains were pushed across the breach till the 25th of the month, when through traffic was resumed.

On the 17th October, an exceptionally heavy fall of rain considerably damaged the bank between miles 319 and 320½ south of Thedaw on the main line, interrupting through traffic till the 19th of the month.

Rohilkund and Kumaon railway system.

On the 9th October, owing to heavy and continuous rainfall, the embankment between miles 2/6 and 2/9 on the Powayan Light railway was washed away, rendering transhipment necessary. The line was made passable for trains on the 11th of the month.

South Indian railway system.

On the 12th November, owing to heavy rainfall the main line, miles 107/9 to 108/3, between Serndanur and Panruti, was submerged, resulting in a wash-out between miles 108/1 and 108/3. Through communication was restored on the 16th November. The line was also damaged in several other places during the year, necessitating transhipment for short periods.

Southern Mahratta railway system.

On the 10th November, owing to abnormally heavy rainfall, the cutting at mile 144/6, between Maklidrug and Dodballapur, on the Guntakal-Bangalore section slipped and totally blocked the road necessitating transhipment. The line was cleared and through communication restored on the 15th of the month.

On the 12th November, at mile $\frac{282}{9-10}$, between Yeliyur and French Rocks, on the Mysore section, floods scoured out the foundations of a 20-foot arch bridge and undermined the north abutment, which subsided, and about 30 feet of bank was washed away behind the abutment. Through communication was restored on the 15th November, transhipment being resorted to in the interval.

Railway staff.

Railway staff—See Appendix 31.

35. The following table shows the number of employés of the different races, European, Eurasian and Native:

Years.	Europeans.	Eurasians.	Natives.	Total.
1899 .	5,292	7,393	329,089	341,774
1900 .	5,229	7,364	337,383	349,976
1901 .	5,493	8,175	353,278	366,946
1902 .	5,875	8,271	378,355	392,501
1903 .	6,022	8,661	387,566	402,249

Volunteer force—See Appendix 32.

36. Of the Europeans and Eurasians, the following number were enrolled as Volunteers:

Year.	Sergeant Instructors furnished by the Army.	Enrolled strength of Volunteers.					Total number of European and Eurasian employés on railways.
		Efficients.			Non-efficients.	Total number of employés enrolled as Volunteers.	
		Officers.	Non-Commissioned Officers.	Volunteers.			
1899 .	123	395	1,460	9,958	152	11,965	12,685
1900 .	122	389	1,406	10,068	175	12,038	12,593
1901 .	120	393	1,345	9,638	300	11,676	13,668
1902 .	121	380	1,305	9,733	604	12,022	14,146
1903 .	122	403	1,333	9,509	1,182	12,427	14,683

Police force—See Appendix 33.

37. The Police force employed for the maintenance of law and order on railways and for the protection of railway property, is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths, and the railways paying seven-tenths of the expense incurred.

Provident Fund—See Appendix 31.

38. There is a Provident Fund, in connection with every railway in India, the object of which is to make some provision for employés against their retirement, or for their families in the event of their dying while still in the service of the railway. The money in this fund cannot be attached by courts of law, nor can it be alienated or hypothecated by the employé. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of this fund and is required to subscribe monthly amounts varying on different railways, but not exceeding 1-12th of his salary. At the close of the half-year, the railway distributes, as bonus among the depositors, a first contribution, equal to one-half of such subscriptions, and a second contribution, if the earnings permit of this being done, not exceeding one-half of such subscriptions or one per cent. of net earnings. In the case of the more prosperous railways, the double contribution is now generally obtained by depositors. The amount thus subscribed amounted at the end of 1903 to 455 lakhs of rupees, the bonus paid by railways amounting to over 113 lakhs.

39. Fines inflicted on, and bonus contributions to the Provident Fund forfeited by employés are not credited to the revenues of the railway, but to what is known as the Fine Fund. The amounts thus withheld are shown in Appendix 34. On most of the railways the money goes back again to the employés in the shape of contributions to recreation clubs, schools and similar institutions and in the relief of families left in destitute circumstances.

Fine Funds—See Appendix 34.

40. On the larger railways, schools are provided and maintained at all centres where the number of children is sufficient to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government in the Educational Department, allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school, and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

Schools—See Appendix 35.

The number attending school amounted, at the close of 1903, to 6,965 children and 4,976 apprentices and workmen. The contributions by Government amounted to Rs. 38,175; by the railways from revenues Rs. 1,02,330; from the Fine Fund Rs. 14,475; and by fees to Rs. 1,32,053.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

Railway surveys.

41. The following surveys were completed during 1903:

Railway surveys.

Bengal-Nagpur railway system.

A line from Chindwara on the Jubbulpore-Gondia extension to Burcooee and Sirgora in the Pench Valley coal-fields, 29·12 miles, on the 2′ 6″ gauge; also the setting out and demarcation of land for the Gondia-Chanda railway as a measure of famine relief work.

Bombay, Baroda and Central India railway system.

Lines from (1) Nar on the Tarapur-Cambay section of the Petlad-Cambay railway to Nadiad, 20·25 miles, on the 5′ 6″ gauge; (2) Zankavao to Vijapur *viâ* Sarda, 37 miles, on the 2′ 6″ gauge; and (3) a re-survey of the Bahadarpur-Garda extension of the Gaekwar's Dabhoi railway, 6·50 miles, on the 2′ 6″ gauge.

Eastern Bengal State railway.

Lines from (1) Ultadingi, about a mile from Sealdah, to Pattipuker and to the Arathoon jute mills, 1·75 miles; (2) a link to connect the Murshidabad branch with the Azimganj branch of the East Indian railway together with a bridge over the Bhagirathi, 5·82 miles; and (3) a bridge over the Ganges from Damukdia to Sara; all on the 5′ 6″ gauge.

East Indian railway.

Lines from (1) Asansol to Hariharpur, 52·35 miles; (2) Ondal to Sainthia, 43·62 miles; (3) Khurja to Hapur, 38·87 miles; and (4) a chord line from Mirzapur on the main line to Maihar on the Jubbulpore line, 140 miles, on the 5′ 6″ gauge.

Great Indian Peninsula railway system.

In connection with the Itarsi-Warangal project, lines from (i) Nagpur to Itarsi *viâ* Patan, Saongi, Sawargaon, Bailona, Multai, Amla, Budnoor and Shahpur, 179 miles; (ii) Wardha to Multai *viâ* Anji Arvi to about 8 miles south of Howurkhaia, then turning sharp north-east direct to Chkheree where it joins (i) at the 58th mile, 86 miles; and (iii) Warora to Bellarpur, 38 miles. Reconnaissance surveys in connection with the Itarsi-Nagpur project of lines, from (*a*) Wardha to Bailona direct, three lines 52, 55 and 61 miles; (*b*) Amla to Chindwara, 80 miles; and (*c*) Botorea, which is on alignment (*b*), down the valley of the river Tawa to Shahpur, 37 miles. All the foregoing on the 5′ 6″ gauge. A branch from Coorla to the Ballard Pier, 9 miles in connection with the Bombay Harbour railway.

Nizam's Guaranteed State railway.

Lines from (1) Jalna to Bhir, 62·97 miles, and (2) a reconnaissance survey from Purna to Latur, 60 miles, on the 3′ $3\frac{3}{8}$″ gauge.

North Western State railway system.

Lines from (1) Sargodha to Shorkot Road (Jech Doab railway, Southern section), 103 miles, (2) Ferozepore to Minchinabad, 85·90 miles, (3) Shahdara (Lahore) to Lyallpur, 72·98 miles, with an alternative, Shahdara to Sangla, 55·17 miles, on the 5′ 6″ gauge and (4) an extension of the Jullunder-Hoshiarpore-Kapurthala railway from Kapurthala to Sultanpur, 15·72 miles, on the 2′ 6″ gauge.

Railway surveys. Projects for new lines.

Railway surveys—*concld.*

Oudh and Rohilkhand State railway. A line from Gujroula to Chandpur, 22·15 miles on the 5′ 6″ gauge.

Assam-Bengal railway. Lines from (1) Kalaura to Sylhet, 34 miles; and (2) Akhaura to Asuganj, 19 miles, on the 3′ 3⅜″ gauge.

Bengal and North-Western railway system. Lines from (1) Burhwal to Sitapur, 60 miles; (2) Savan to Gopalgunj, 20·57 miles, (3) Daronda to Mahrajgunj, 3·90 miles, and (4) Bhagalpur on the East Indian railway to the Bengal and North-Western railway ghat station on the Ganges, 2·14 miles; all on the 3′ 3⅜″ gauge.

A reconnaissance survey for a line from Ranpur to Dhundhuka, 16·50 miles, on the 3′ 3⅜″ gauge.

Bhavnagar-Gondal-Junagad-Porbandar railway.

Burma railways. A loop line from Thamaing on the Irrawaddy line to Malagon on the Sittang line, 6·70 miles, on the 3′ 3⅜″ gauge.

Rohilkund and Kumaon railway system. Lines from (1) Pilibhit to Burmdeo, 38·44 miles, and (2) Lalkua to Kashipur, 45 miles, on the 3′ 3⅜″ gauge.

South Indian railway. Lines from (1) Pamban to Rameswaram, 11·83 miles, and (2) Dindigal *viâ* Satyamangalam to Mettupalaiyam, 137·09 miles, on the 3′ 3⅜″ gauge.

42. The following surveys are in progress:

Bombay, Baroda and Central India railway system. Lines from (1) Viramgam to Dhrangadra, 40 miles, and (2) Nagda to Muttra, 355 miles, on the 5′ 6″ gauge.

Eastern Bengal State railway system. Lines from (1) Golakgunj near Dhubri to Salmara Road on the way to Gauhati, 55 miles; (2) from Katihar to Godagari, 105 miles, and (3) Raiganj to Malda, 42 miles; all on the 3′ 3⅜″ gauge.

East Indian railway. A line from Barharwa *viâ* Azimganj to Katwa, 94 miles, on the 5′ 6″ gauge.

Great Indian Peninsula railway system. An alternative alignment of the Itarsi-Nagpur project (1) from a point near Shahpur on the alignment of the 1903 survey to Nagpur by a route to the east of existing alignments, length about 110 miles, with a branch from Meijawar to Chindwara and the coal-fields, 32 miles; (2) a second alternative alignment of the same project from Amla at mile 42 of the 1903 alignment, direct to Nagpur, 84 miles; and (3) a branch of the Agra-Delhi Chord railway from Muttra *viâ* Brindaban to Aligarh about 37 miles; all on the 5′ 6″ gauge.

Oudh and Rohilkhand State railway. The final location and staking out of the line from Phaphamau to Zafarabad (Allahabad-Jaunpur project), 57·50 miles, on the 5′ 6″ gauge.

South Indian railway. Lines from (1) Palni to Podanur, 59 miles, on the 5′ 6″ gauge, and (2) Tinnevelly to Tiruchendur, 38 miles, on the 3′ 3⅜″ gauge.

Projects for new lines.

Projects for new lines. 43. The Promoters who were originally negotiating for the construction, on the 3′ 3⅜″ gauge, of the Kurnool Road (Dhone)-Kurnool railway (Madras), 32 miles, and the Bezwada-Masulipatam railway (Madras), 50 miles, have been permitted to include in their scheme the Guntur-Repalli line (Madras), 38 miles, and the Phirangipuram-Gurzala line (Madras), 50¾ miles, for construction on the same gauge, and allowed an extension of time up to 30th April 1904 for the formation of a company and for raising the requisite capital. The concession has now lapsed.

The scheme for the construction, on the 2′ 6″ gauge, of the Raichur-Wondalli railway (Hyderabad), 43 miles, the concession for which was granted to the Wondalli (Deccan) Gold Mines Company and the Hyderabad (Deccan) Company in June 1900, has not advanced any further.

Revised proposals, from the Promoters, for the construction, on the 5′ 6″ gauge, of the Amritsar-Tarn Taran-Patti railway (Punjab), about 27 miles, are under consideration.

Negotiations which were stated in the last year's report to have been proceeding for the construction, on the 2′ 6″ gauge, of the Berhampore-Russelkonda railway (Madras), 49 miles, have not progressed, while those for the construction, on the 5′ 6″ gauge, of the Vizianagram-Raipur railway with Sointilla branch (Madras and Central Provinces), 359 miles, and the Kangra Valley, 2′ 6″ gauge (Punjab), 87 miles, have been terminated owing to the inability of the Promoters to form a company

Projects for new lines.

on the terms offered. The proposals for the construction of the Baran-Ajmer-Marwar railway (Rajputana), 213 miles, on the 3′ 3⅜″ gauge, have been rejected in consequence of the Promoters requiring a firm guarantee of 3 per cent. in sterling. Projects for new lines—*concld.*

Negotiations are still in progress for the construction, on the 2′ 6″ gauge, of the Rawalpindi-Murree railway (Punjab), 48 miles.

Proposals were received during the year for the construction of the following lines :—

	Gauge.	Miles.
(1) A light electric tramway from Sarai Kala *vid* Abbottabad to the Kashmir frontier (North-West Frontier Province and Kashmir)	3′ 3⅜″	80
(2) Railways from—		
(*a*) Mymensingh *vid* Netrokona to Bara Ari with a branch to Gauripur	3′ 3⅜″	36½
(*b*) Singhjani *vid* Sherpur to Nalitbari	2′ 6″	25

The consideration of (1) was postponed pending a decision on the Kashmir railway scheme, while the Promoters of (2) were asked to renew their application in January 1904.

SIMLA;
Dated 21st May 1904.

C. W. HODSON, *M. Inst. C.E.*,
Offg. Secretary to the Government of India,
Public Works Department, Railways.

APPENDICES

OF

MILEAGE AND CAPITAL OUTLAY.

Appendix 1.
List of Railways.

APPENDIX 1.

List of open lines of Railway at the close of the Calendar year 1903 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 2 of Report.)

NOTES—For particulars of railways comprising each railway system, and of mileage laid with more than one track, see Appendix 38.
For mileage added from 1st January 1903 to 30th April 1904, see Appendix 2.
For total mileage opened during, and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General, see Appendix 3.
For mileage of individual railways opened each year from the commencement, see Appendix 38.
For mileage under construction or sanctioned, see Appendix 4.

Number. Main head.	Number. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of railway, in miles, open on 31st December 1903, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		A.														
3	(g)	Ahmedabad-Dholka*	A. D.	Bombay, Baroda and Central India Ry. Co.	23-2-03	3′ 3⅜″	...	...	...	33·50	...	...	...	...	...	
3	(h)	Ahmedabad-Parantij*	A. P.	Bombay, Baroda and Central India Ry. Co.	1-5-97	3′ 3⅜″	...	...	...	54·70	...	...	...	...	...	
11	(a)	Assam-Bengal	A. B.	Assam-Bengal Ry. Co.	1-7-95	3′ 3⅜″	...	740·38	...	...	...	...	...	...	...	
		B.														
24	(a)	Barsi Light†	B. L.	Barsi Light Ry. Co.	1-3-97	2′ 6″	...	...	...	21·59	...	...	...	...	...	
12	(d)	Bengal and North-Western (Company's section).†	B. & N. W.	Bengal and North-Western Ry. Co.	2-4-84	3′ 3⅜″	...	...	...	312·96	...	...	...	...	...	
1	(a)	Bengal Central‡	B. C.	Bengal Central Ry. Co.	16-10-82	5′ 6″	...	125·01	...	...	...	...	...	...	...	
13	a	Bengal Dooars§	B. D.	Bengal Dooars Ry. Co.	15-1-93	3′ 3⅜″	...	...	...	36·40	...	...	...	...	...	
13	(b)	Bengal Dooars Extensions.†	B. D. E.	Bengal Dooars Ry. Co.	20-4-00	3′ 3⅜″	...	...	...	116·56	...	...	...	...	...	
2	(a)	Bengal-Nagpur	B. N.	Bengal-Nagpur Ry. Co.	1880	5′ 6″	...	1,682·46	...	...	...	...	...	...	...	
8	(b)	Bezwada Extension	B. E.	Nizam's Guaranteed State Rys. Co.	10-2-89	5′ 6″	...	20·58	...	...	...	...	...	...	...	
14	(a)	Bhavnagar-Gondal-Junagad-Porbandar	B. G. J. P.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	20-12-80	3′ 3⅜″	...	...	...	...	...	‖384·19	...	...	...	
6	(b)	Bhopal-Itarsi (British section).	B. I.	Great Indian Peninsula Ry. Co.	1-6-82	5′ 6″	...	13·11	...	...	...	...	...	...	...	
		Bhopal-Itarsi (Native state section).			18-11-84	5′ 6″	...	...	...	...	...	...	44·28	...	...	
6	(c)	Bhopal-Ujjain	B. U.		11-11-95	5′ 6″	...	...	...	...	...	...	113·27	...	...	
18	(b)	Bikaner	J. B. B.	Jodhpur-Bikaner Ry.	9-12-91	3′ 3⅜″	...	...	...	...	...	245·35	...	...	...	
6	(d)	Bina-Goona-Baran	B. G. B.	Great Indian Peninsula Ry. Co.	23-9-95	5′ 6″	...	...	...	...	...	...	145·63	...	...	
21	(b)	Birur-Shimoga	B. S. G.	Southern Mahratta Ry. Co.	1-12-99	3′ 3⅜″	...	...	...	...	...	...	37·92	...	...	
3	(a)	Bombay, Baroda and Central India.¶	B. B. & C. I.	Bombay Baroda and Central India Ry. Co.	10-2-60	5′ 6″	...	...	** 504·35	...	...	...	...	...	...	
4	(b)	Brahmaputra-Sultanpur.††	B. S.	Eastern Bengal State Ry.	1-4-99	3′ 3⅜″	...	...	59·37	...	...	...	...	...	...	
25	(a)	Bukhtiarpore-Behar Light.§	B. B.	Bukhtiarpore-Behar Light Ry. Co.	1-7-03	2′ 6″	...	...	...	18·50	...	...	...	...	...	
15	(a)	Burma	B.	Burma Railways Co.	2-5-77	3′ 3⅜″	...	1,336·97	...	...	...	...	...	...	...	
		C.														
10	(c)	Cawnpore-Burhwal (metre gauge link).	C. B. M.	Oudh and Rohilkhand State Ry.	24-11-96	3′ 3⅜″	‡‡79·60	...	...	...	...	...	...	...	...	
4	(e)	Cooch Behar	C. B.	Eastern Bengal State Ry.	15-9-93	2′ 6″	...	...	...	...	...	...	...	33·60	...	
		D.														
9	(k)	Dandot Light	D. L.	North Western State Ry.	5-7-89	2′ 0″	6·18	...	...	...	...	...	...	...	...	
36	(a)	Darjeeling-Himalayan.§§	D. H.	Darjeeling-Himalayan Ry. Co.	23-8-80	2′ 0″	...	...	...	51·00	...	...	...	...	...	
5	(b)	Delhi-Umballa-Kalka.¶¶	D. U. K.	East Indian Ry. Co.	1-3-91	5′ 6″	...	...	...	162·36	...	...	...	...	...	
16	(a)	Deoghur†	D.	Deoghur Ry. Co.	23-12-82	3′ 3⅜″	...	...	...	4·79	...	...	...	...	...	
					Carried over		85·78	3,918·51	563·72	1,312·36	...	579·54	341·10	33·60	...	

* Branch line company assisted under "Rebate terms."
† Receiving land only from the Government of India.
‡ Although for convenience classed amongst State lines, this line is the property of the Bengal Central Railway Company.
§ Subsidized by the District Board.
‖ Includes 5·23 miles of Dock estate and quarry lines.
¶ Guaranteed under terms of the old contracts.
** Includes the Viramgam-Wadhwan section, 3′ 3⅜″ gauge.
†† Guaranteed under terms of modern contracts.
‡‡ Excludes 3·66 miles of the Lucknow-Bareilly railway, between Aishbagh and Daliganj, worked over, but includes 16·79 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge mileage between Burhwal and Bara Banki and 0·59 mile on the Cawnpore bridge of the Oudh and Rohilkhand State railway.
§§ Subsidized by the Local Government.
¶¶ Subsidized by the Government of India.

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1903 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 2 of Report.)

NOTES.—For particulars of railways comprising each railway system, and of mileage laid with more than one track, see Appendix 38.
For mileage added from 1st January 1903 to 30th April 1904, see Appendix 2.
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For mileage under construction or sanctioned, see Appendix 4.

Number. Main head.	Number. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1903, under several heads of classification.								Remarks.
							State lines worked by agency of		Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of			
							State railway.	Company.				Native State itself.	Company.	State railway.	Lines in foreign territory.
					Brought forward		85·78	3,918·51	563·72	1,312·36	...	579·54	341·10	33·60	...
		D—*concld.*													
14	(b)	Dharangadra . .	D.H.R.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	1-6-98	3′ 3⅜″	...	...	...	...	...	20·83	...	...	...
17	(a)	Dibru-Sadiya* . .	D. S.	Assam Railways and Trading Co.	Aug. 82	3′ 3⅜″	...	...	...	77·50	...	...	...	...	...
		E.													
		Eastern Bengal State—													
4	(a)	Southern and Eastern sections.	E. B. S.	Eastern Bengal State Ry.	2-1-62	5′ 6″	278·68	...	...	...	...	...	...	...	...
		Northern, Behar and Kamla-Dhubri sections.			28-8-77	3′ 3⅜″	498·49	...	...	...	...	...	...	...	...
4	(c)	Teesta-Kurigram branch and British section, Santrabari extension.	E. B. S. M.		18-7-81	2′ 6″	34·78	...	...	...	...	...	...	...	...
		Dacca section .			4-1-85	3′ 3⅜″	85·82	...	...	...	...	...	...	...	...
5	(a)	East Indian . .	E. I.	East Indian Ry. Co.	15-8-64	5′ 6″	...	1,935·11	...	...	...	...	...	...	...
		G.													
3	(m)	Gaekwar's Dabhoi . .	G. D.	Bombay, Baroda and Central India Ry. Co.	8-4-73	2′ 6″	...	...	...	...	...	...	88·00	...	...
3	(d)	Gaekwar's Mehsana .	G. M.		21-3-87	3′ 3⅜″	...	...	...	...	...	...	92·63	...	...
	(b)	Godhra-Ratlam-Nagda	G. R. N.		16-1-93	5′ 6″	...	141·14	...	...	...	...	...	...	...
6	(a)	Great Indian Peninsula	G. I. P.	Great Indian Peninsula Ry. Co.	18-4-53	5′ 6″	...	1,561·63	...	...	...	...	...	...	...
21	(c)	Guntakal-Mysore Frontier.	G. M. F.	Southern Mahratta Ry. Co.	1-3-92	3′ 3⅜″	...	119·50	...	...	...	...	...	...	...
6	(f)	Gwalior Light . .	G. L.	Great Indian Peninsula Ry. Co.	2-12-99	2′ 0″	...	...	...	...	...	...	126·14	...	...
		H.													
10	(b)	Hardwar-Dehrat . .	H. D.	Oudh and Rohilkhand State Ry.	1-3-00	5′ 6″	...	...	32·04	...	...	...	...	...	...
21	(d)	Hindupur (Yesvantpur-Mysore Frontier).	H.	Southern Mahratta Ry. Co.	15-12-92	3′ 3⅜″	...	...	...	...	...	...	51·35	...	...
37	(a)	Howrah-Amta Light‡.	H. A.	Howrah-Amta Light Ry. Co.	1-7-97	2′ 0″	...	...	...	28·69	...	...	...	...	...
38	(a)	Howrah-Sheakhala Light.‡	H. S.	Howrah-Sheakhala Light Ry. Co.	2-8-97	2′ 0″	...	...	...	19·75	...	...	...	...	...
3	(e)	Hyderabad-Godavari-Valley.	H. G. V.	Nizam's Guaranteed State Rys. Co.	21-10-99	3′ 3⅜″	...	...	...	...	...	...	391·42	...	...
		I.													
6	(e)	Indian Midland . .	I. M.	Great Indian Peninsula Ry. Co.	10-1-78	5′ 6″	...	805·03	...	...	...	...	...	...	...
					Carried over .		983·65	8,480·92	595·76	1,438·30	...	600·37	1,090·64	33·60	...

* Subsidized by the Local Government.
† Guaranteed under terms of modern contracts.
‡ Subsidized by the District Board.

Appendix 1.
List of Railways.

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1903 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 2 of Report.)

NOTES.—For particulars of railways comprising each railway system, and of mileage laid with more than one track, see Appendix 38.
For mileage added from 1st January 1903 to 30th April 1904, see Appendix 2.
For total mileage opened during, and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General, see Appendix 3.
For mileage of individual railways opened each year from the commencement, see Appendix 38.
For mileage under construction or sanctioned, see Appendix 4.

Number. Main head.	Number. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1903, under several heads of classification.								Remarks.
							State lines worked by agency of		Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of			
							State railway.	Company.				Native State itself.	Company.	State railway.	
					Brought forward		983·65	8,436·92	595·76	1,438·30	...	600·37	1,090·64	33·60	...
		J.													
9	(b)	Jammu and Kashmir (Native state section).*	J. K.	North Western State Ry.	15-3-90	5′ 6″	...	...	...	...	...	...	...	15·92	...
14	(c)	Jamnagar . . .	J. N.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	3-4-97	3′ 3⅜″	...	...	...	...	...	†54·22	...	...	...
14	(d)	Jetalsar-Rajkot . .	J. R.		12-4-93	3′ 3⅜″	...	...	...	...	...	46·21	...	...	...
18	(a)	Jodhpur . . .	J. B.	Jodhpur-Bikaner Ry.	24-6-92	3′ 3⅜″	...	...	...	...	...	454·94	...	...	...
18	(c)	Jodhpur-Hyderabad (British section).‡	J. H.	Jodhpur-Bikaner Ry.	18-8-92	3′ 3⅜″	...	123·98	...	...	...	...	...	...	...
39	(a)	Jorhat	J.	Jorhat State Ry.	15-12-84	2′ 0″	30·25	...	...	...	...	...	...	...	...
2	(b)	Jubbulpore-Gondia Extension.	J. G. E.	Bengal-Nagpur Ry. Co.	18-4-03	2′ 6″	...	76·95	...	...	...	...	...	...	...
		K.													
28	(a)	Kalka-Simla§ . .	K. S.	Delhi-Umballa-Kalka Ry. Co.	9-11-03	2′ 6″	...	...	...	59·44	...	...	...	...	...
20	(b)	Karaikkal-Peralam .	K. P.	South Indian Ry. Co. .	14-3-98	3′ 3⅜″	...	...	...	...	...	...	...	...	14·65
9	(f)	Khushalgarh-Kohat-Thal.	K. K. T.	North Western State Ry.	25-5-02	2′ 6″	91·73	...	...	...	...	...	...	...	...
7	(b)	Kolar Gold-fields . .	K. G.	Madras Ry. Co. . .	1-6-04	5′ 6″	...	...	...	...	...	...	9·88	...	...
21	(e)	Kolhapur . . .	K. L.	Southern Mahratta Ry. Co.	21-4-91	3′ 3⅜″	...	...	...	...	...	...	29·27	...	...
		L.													
17	(b)	Ledo and Tikak-Margherita Colliery.	L. T.	Assam Railways and Trading Co.	17-2-84	3′ 3⅜″	...	...	...	...	11·00	...	...	...	...
19	(b)	Lucknow-Bareilly .	L. B.	Rohilkund and Kumaon Ry. Co.	12-10-84	3′ 3⅜″	...	237·04	...	...	...	...	...	...	...
9	(c)	Ludhiana-Dhuri-Jakhal	L. D. J.	North Western State Ry.	10-4-01	5′ 6″	...	...	...	...	...	...	...	78·66	...
		M.													
7	(a)	Madras‖ . . .	M.	Madras Ry. Co.	1-7-56	5′ 6″	...	...	899·91	...	...	...	...	...	...
7	(c)	Madras (North-East line).	M. N. E.	Madras Ry. Co.	20-2-93	5′ 6″	...	¶497·19	...	...	...	...	...	...	...
30	(a)	Morvi . . .	M. R. W.	Morvi Ry. . .	11-3-86	2′ 6″	...	...	...	...	...	94·38	...	...	...
4	(d)	Mymensingh-Jamalpur-Jagannathganj.**	M. J. J.	Eastern Bengal State Ry.	15-10-98	3′ 3⅜″	...	...	...	52·70	...	...	...	...	...
21	(f)	Mysore-Nanjangud .	M. N.	Southern Mahratta Ry. Co.	1-12-91	3′ 3⅜″	...	...	...	...	...	...	15·90	...	...
21	(g)	Mysore section (Southern Mahratta).	M. S.	Southern Mahratta Ry. Co.	1-2-81	3′ 3⅜″	...	296·22	...	...	...	...	...	...	...
		N.													
3	(c)	Nagda-Ujjain . .	N. U.	Bombay, Baroda and Central India Ry. Co.	15-7-96	5′ 6″	...	...	...	...	...	...	34·32	...	...
7	(d)	Nilgiri . . .	N.	Madras Ry. Co. . .	15-6-99	3′ 3⅜″	...	16·99	...	...	...	...	...	...	...
8	(a)	Nizam's Guaranteed State.	N. G. S.	Nizam's Guaranteed State Ry. Co.	9-10-74	5′ 6″	...	...	...	...	...	...	330·13	...	...
11	(b)	Noakhali (Bengal)** .	N. B.	Assam-Bengal Ry. Co. .	15-5-03	3′ 3⅜″	...	...	...	34·90	...	...	...	...	...
9	(a)	North Western State .	N. W.	North Western State Ry.	13-5-01	5′ 6″	3,123·76 ††	...	...	...	...	...	...	...	...
9	(g)	Nowshera-Durgai .	N. D.	North Western State Ry.	1-1-01	2′ 6″	40·25	...	...	...	...	...	...	...	...
		O.													
10	(a)	Oudh and Rohilkhand State.	O. & R.	Oudh and Rohilkhand State Ry.	23-4-67	5′ 6″	1,101·19 ‡‡	..	...	...	...	...	...	...	...
					Carried over .		5,370·83	9,729·29	1,495·67	1,585·34	11·00	1,250·10	1,510·04	128·18	14·65

* The British section of this railway forms an integral portion of the North Western State railway.
† Includes 3·93 miles of Dock estate lines.
‡ The Native State section of this railway forms an integral portion of the Jodhpur section of the Jodhpur-Bikaner railway.
§ Receiving land only from the Government of India.
‖ Guaranteed under terms of the old contracts.
¶ Includes 2·66 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge between Bezwada and Kistna Block hut and 0·31 mile of 3′ 3⅜″ gauge between Kistna Block hut and Tadepalli.
** Branch line company assisted under "Rebate terms".
†† Includes 5·63 miles of military lines not used for public traffic and 26·28 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge line between Bhatinda and Kot Kapura, over which the Rajputana-Malwa railway trains also work.
‡‡ Includes 16·79 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge line from Burhwal to Bara Banki and 0·59 mile on the Cawnpore Bridge and 1·81 mile on the 3′ 3⅜″ gauge between the Oudh and Rohilkhand State railway cantonment and the Bengal and North-Western railway city station at Benares.

APPENDIX 1—*concld.*

List of open lines of Railway at the close of the Calendar year 1903 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

(Referred to in paragraph 2 of Report.)

NOTES.—For particulars of railways comprising each railway system, and of mileage laid with more than one track, see Appendix 38.
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For mileage of individual railways opened each year from the commencement, see Appendix 38.
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Number. Main head.	Number. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1903, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		Brought forward.					5,370·83	9,729·29	1,495·67	1,585·34	11·00	1,250·10	1,510·64	128·18	14·65	
		P.														
3	(*f*)	Palanpur-Deesa	P. D.	Bombay, Baroda and Central India Ry. Co.	8-11-93	3′ 3⅜″	...	17·29	...	...	...	...	...	...	...	
2	(*c*)	Parlakimedi Light	P. L. L.	Bengal-Nagpur Ry. Co.	1-4-00	2′ 6″	...	...	...	...	...	...	24·62	...	...	
3	(*d*)	Petlad-Cambay (Anand-Tarapur section).	P. C. A.	Bombay, Baroda and Central India Ry. Co.	5-5-90	5′ 6″	...	...	...	...	...	...	21·50	...	...	
3	(*e*)	Petlad-Cambay (Tarapur-Cambay section).	P. C. T.		20-6-01	5′ 6″	...	...	...	...	...	...	10·92	...	...	
20	(*c*)	Pondicherry	P.	South Indian Ry. Co.	15-12-79	3′ 3⅜″	...	...	...	...	...	...	...	...	7·85	
19	(*c*)	Powayan Light*	P. W. L.	Rohilkund and Kumaon Ry. Co.	17-6-90	2′ 6″	...	...	...	39·50	...	...	...	...	...	
		R.														
2	(*d*)	Raipur-Dhamtari	R. D.	Bengal-Nagpur Ry. Co.	10-9-00	2′ 6″	...	56·24	...	...	...	...	...	...	...	
3	(*n*)	Rajpipla	R.	Bombay, Baroda and Central India Ry. Co.	1-7-97	2′ 6″	...	...	...	...	...	...	37·37	...	...	
9	(*d*)	Rajpura-Bhatinda	R. B.	North Western State Ry.	1-11-84	5′ 6″	...	...	...	...	...	...	...	107·05	...	
3	(*k*)	Rajputana-Malwa	R. M.	Bombay, Baroda and Central India Ry. Co.	14-2-73	3′ 3⅜″	...	1,649·30	...	...	...	...	...	...	...	
31	(*a*)	Ranaghat-Krishnagar Light.‡	R. K. L.	Ranaghat-Krishnagar Light Ry. Co.	5-4-99	2′ 6″	...	...	...	20·25	...	...	...	...	...	
19	(*a*)	Rohilkund and Kumaon.§	R. & K.	Rohilkund and Kumaon Ry. Co.	12-10-94	3′ 3⅜″	...	...	...	53·22	...	...	...	...	...	
		S.														
12	(*b*)	Sagauli-Raxaul*	S. R.	Bengal and North-Western Ry. Co.	1-3-99	3′ 3⅜″	...	...	...	18·09	...	...	...	...	...	
7	(*e*)	Shoranur-Cochin	S. C.	Madras Ry. Co.	2-6-02	3′ 3⅜″	...	...	...	...	...	...	64·75	...	...	
5	(*c*)	South Behar‖	S. B.	East Indian Ry. Co.	5-7-99	5′ 6″	...	...	...	78·76	...	...	...	...	...	
20	(*a*)	South Indian	S. I.	South Indian Ry. Co.	15-7-61	3′ 3⅜″	...	1,123·13	...	...	...	...	...	...	...	
21	(*a*)	Southern Mahratta	S. M.	Southern Mahratta Ry. Co.	24-3-64	3′ 3⅜″	...	1,042·04	...	...	...	...	...	...	...	
9	(*e*)	Southern Punjab‖	S. P.	North Western State Ry.	10-11-97	5′ 6″	...	...	...	425·33	...	...	...	...	...	
		T.														
20	(*d*)	Tanjore District Board	T. D. B.	South Indian Ry. Co.	2-4-94	3′ 3⅜″	...	...	...	99·46	...	...	...	...	...	
3	(*f*)	Tapti Valley‖	T. V.	Bombay, Baroda and Central India Ry. Co.	1-12-98	5′ 6″	...	...	...	155·48	...	...	...	...	...	
33	(*a*)	Tarakeshwar-Magra Light.	B. P.	Bengal Provincial Light Ry. Co.	7-11-94	2′ 6″	...	...	...	...	31·12	...	...	...	...	
5	(*d*)	Tarkessur*	T.	East Indian Ry. Co.	1-1-85	5′ 6″	...	...	...	22·22	...	...	...	...	...	
34	(*a*)	Tezpore-Balipara Light‡	T. B.	Tezpore-Balipara Light Ry. Co.	9-8-94	2′ 6″	...	...	...	20·10	...	...	...	...	...	
35	(*a*)	Thaton-Duyinzaik Light.¶	T. D.	Thaton-Duyinzaik Light Ry. Co.	11-2-95	2′ 6″	...	...	...	7·78	...	...	...	...	...	
20	(*e*)	Tinnevelley-Quilon (Travancore) (British section).	T. Q. B.	South Indian Ry. Co.	1-6-02	3′ 3⅜″	...	49·50	...	...	...	...	...	...	...	
20	(*f*)	Tinnevelly-Quilon (Travancore) (Native state section).	T. Q. N.	South Indian Ry. Co.	1-8-03	3′ 3⅜″	...	...	...	...	...	...	0·43	...	...	
12	(*c*)	Tirhoot state	T. S.	Bengal and North-Western Ry. Co.	1-11-75	3′ 3⅜″	...	516·89	...	...	...	...	...	...	...	
		U.														
22	(*a*)	Udaipur-Chitor	U. C.	Udaipur-Chitor Ry.	1-8-95	3′ 3⅜″	...	...	...	...	...	67·30	...	...	...	
		V.														
3	(*l*)	Vijapur-Kalol-Kadi	V. K. K.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3′ 3⅜″	...	...	...	...	...	...	41·37	...	...	
		W.														
21	(*h*)	West of India Portuguese.	W. I. P.	Southern Mahratta Ry. Co.	17-1-87	3′ 3⅜″	...	...	...	...	...	...	...	...	51·11	
		Total mileage of railways open in India and Burma on the 31st December 1903.				5′ 6″	4,503·63	6,781·26	1,436·30	844·16	...	...	709·93	201·63	...	
						3′ 3⅜″	664·01	7,269·22	59·37	1,395·48	11·00	1,223·04	724·94	...	73·61	
						2′ 6″	166·76	133·19	...	187·14	31·12	94·36	149·99	33·60	...	
						2′ 0″	36·43	...	...	99·44	...	...	126·14	...	...	
						Total...	5,370·83	14,183·67	1,495·67	2,526·22	42·12	1,317·40	1,711·00	235·23	73·61	

* Receiving land only from the Government of India.
† Includes 2·10 miles, 3·07 miles and 0·94 mile laid on the 5′ 6″ gauge at Ujjain, between Agra cantonment and Agra East Bank stations and from Lahori Gate cabin to Brewery cabin at Delhi, respectively, and 26·26 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge mileage between Bhatinda and Kot Kapura over which the North Western State railway trains also work.
‡ Subsidized by the District Board.
§ Subsidized by the Government of India.
‖ Branch line company assisted under "Rebate terms."
¶ Subsidized by the Local Government.

Appendix 2.
Additions to mileage.

APPENDIX 2.

(Appendix 3 in Report for 1902.)

Mileage added to the Railway System of India during the Calendar year 1903 and the four months following.

(Referred to in paragraph 3 of Report.)

NOTE.—For references to the several mileage statements, see notes at head of Appendix 1.

NUMBER.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1903.	Date of opening for traffic.	ADDITIONS, IN MILES, MADE TO OPEN MILEAGE DURING 1903.							
						Length.				Total mileage added to railway administration.			
Main head.	Sub-head.					5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″
				Midnapore to Bhojudih	1st February	114·50	...	...	...				
				Bhojudih to Bhaga	20th April	6·66	...	...	...				
	(*a*)		Bengal-Nagpur.	Bhaga to Malkera	1st September	8·79	...	...	...				
				Chaurashi branch	1st February	8·16	...	...	...				
2		Bengal-Nagpur		Bhowra branch	14th May	1·95	...	...	...				
	(*b*)		Jubbulpore-Gondia Extension.	Gondia to Nainpur	18th April	...	...	76·95	...	140·06	...	76·95	...
	(*a*)		Bombay, Baroda and Central India.	Godhra to Baroda	23rd December	43·67	...	...	...				
	(*g*)		Ahmedabad-Dholka.	Sabarmati to Bavla	23rd February	...	24·75	...	...				
3	(*l*)	Bombay, Baroda and Central India.	Vijapur-Kalol-Kadi.	Bavla to Dholka / Kalol to Kadi	1st April / 13th July	...	8·75 / 11·93	...	...				
	(*m*)		Gaekwar's Dabhoi.	Padra to Mobha	10th July	...	...	9·20	...	43·67	45·43	9·20	...
4	(*a*)	Eastern Bengal	Eastern Bengal	Extension of Chitpore terminus.	1st March / 1st September	0·68 / 0·98	...	...	...	1·66	...	...	...
				Katrasgarh to Khanoodih	7th March	7·23	...	...	...				
5	(*a*)	East Indian	East Indian	Northern sec., Malkera-Katrasgarh cross connection.	15th August	0·67	...	...	...				
				Dhanbaid to Jharia	1st May	3·79	...	...	...	11·69	...	...	...
6	(*e*)	Great Indian Peninsula.	Indian Midland	Ait to Kunch	7th December	8·50	...	...	...	8·50	...	...	...
7	(*a*)	Madras	Madras	Tellicherry to Cannanore	20th May	11·82	...	...	...	11·82	...	...	...
	(*a*)		North Western State.	Malakwal to Sargoda	1st April	46·25	...	...	...				
9	(*f*)	North Western State.	Khushalgarh-Kohat-Thal.	Kohat to Thal	1st April	...	...	62·03	...	46·25	...	62·03	...
				Partabgarh to Siwait	20th March	24·98	...	...	...				
10	(*a*)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Chilbila to Sultanpur	10th April	22·07	...	...	...				
				Balamau to Madhoganj	20th December	14·50	...	...	...	61·55	...	...	...
				Lakwa to Bhojo	1st February	...	12·72	...	...				
	(*a*)		Assam-Bengal	Bhojo to Tinsukia	1st March	...	41·94	...	...				
11		Assam-Bengal		Damchara to Lumding	1st December	...	96·70	...	...				
	(*b*)		Noakhali (Bengal).	Laksam to Noakhali	15th May	...	30·46	...	...				
				Noakhali to Saheb Ghatta	10th November	...	4·44	...	...	...	186·26	...	...
12	(*a*)	Bengal and North-Western.	Bengal and North-Western.	Phephna to Ghazipur Ghat	11th March	...	31·16	...	...	...			
				Azamgarh to Shahganj	14th February	...	34·81	...	...	...	65·97	...	...
				Chalsa to Chengmari	1st January	...	13·45	...	...				
13	(*b*)	Bengal Dooars	Bengal Dooars Extensions.	Chengmari to Dalgaon	23rd March	...	15·84	...	...				
				Dalgaon to Madarihat	14th June	...	9·31	...	...	...	38·60	...	...
				Hsipaw to Lashio	1st March	...	50·94	...	...				
15	(*a*)	Burma	Burma	Letpadan to Tharawaw	20th March	...	23·07	...	...				
				Henzada to Henzada Shore	20th March	...	2·46	...	...	...	76·47	...	...
19	(*b*)	Rohilkund and Kumaon.	Lucknow-Bareilly.	Dudhwa to Chandan Choki	4th April	...	5·87	...	...	...	5·87	...	...
	(*d*)		Tanjore District Board.	Pattukkottai to Arantangi	31st December	...	28·35	...	...				
	(*e*)		Tinnevelly-Quilon (Travancore) (Br. sec).	Kallidaikurichi to Shencottah	1st August	...	30·45						
20	(*f*)	South Indian	Tinnevelly-Quilon (Travancore) (Native state sec).	.....	1st August	...	0·43	...	...	...	59·23	...	...
25	(*a*)	Bukhtiarpore-Behar Light.	Bukhtiarpore-Behar Light.	Bukhtiarpore to Behar	1st July	...	...	18·50	...	...	...	18·50	...
28	(*a*)	Kalka-Simla	Kalka-Simla	Kalka to Simla	9th November	...	...	59·44	...	...	...	59·44	...
					Total mileage added during 1903					325·20	477·83	226·12	...
				MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1904.									
	(*a*)		Bengal-Nagpur	Bauria to Fort Gloster	12th February	2·00	...	...	...				
2	(*b*)	Bengal-Nagpur	Jubbulpore-Gondia Extension.	Nainpur to Seoni	12th February	...	...	47·26	...	2·00	...	47·26	...
6	(*f*)	Great Indian Peninsula.	Gwalior Light	Gwalior to Jaura	1st January	...	...	...	31·34	...	...	...	31·34
7	(*a*)	Madras	Madras	Cannanore to Azhikal	15th March	3·90	...	...	...	3·90	...	...	...
10	(*a*)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Fyzabad to Sultanpur	1st February	36·37	...	...	...				
				Siwait to Phaphamau	20th January	3·63	...	...	...	40·00	...	...	...
12	(*a*)	Bengal and North-Western.	Bengal and North-Western.	Kopaganj to Dohrighat	21st March	...	21·70	...	...				
				Aunrihar to Jaunpur City	21st March	...	36·14	...	...	...	57·84	...	...
					Total mileage added from 1st January to 31st March 1904					45·90	57·84	47·26	31·34
				MILEAGE ADDED FROM 1ST TO 30TH APRIL 1904.									
38	(*a*)	Bengal Provincial Light.	Tarakeshwar-Magra.	Magra to Tribeni	14th April	...	...	2·15	...	...	...	2·15	...
					GRAND TOTAL MILEAGE OPEN ON 30TH APRIL 1904					14,522·81	11,478·51	845·57	293·35

APPENDIX 3.

(Appendix 4 in Report for 1902.)

Total Railway mileage opened for traffic during, and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General.

NOTES.—For mileage of individual railways opened each year from commencement, see Appendix 38.
For references to the several mileage statements, see notes at head of Appendix 1.

CALENDAR YEAR.	Total actual mileage opened during the year.	Deduct corrections, abandonments, etc., of mileage.	Net mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.
1853	20	...	20	20	169	Marquis of Dalhousie.
1854	50	+1	51	71		
1855	99	—1	98	169		
1856	103	...	103	272	1,418	Earl Canning.
1857	15	...	15	287		
1858	140	...	140	427		
1859	198	...	198	625		
1860	212	+1	213	838		
1861	748	+1	749	1,587		
1862	746	...	746	2,333	920	Earl of Elgin.
1863	174	...	174	2,507		
1864	451	...	451	2,958	1,501	Lord Lawrence.
1865	405	...	405	3,363		
1866	200	...	200	3,563		
1867	367	—1	366	3,929		
1868	78	+1	79	4,008		
1869	248	—1	247	4,255	1,066	Earl of Mayo.
1870	516	...	516	4,771		
1871	302	+1	303	5,074		
1872	303	—8	295	5,369	1,467	Lord Northbrook.
1873	327	+1	328	5,697		
1874	477	+52	529	6,226		
1875	366	—51	315	6,541		
1876	319	...	319	6,860	2,621	Lord Lytton.
1877	460	...	460	7,320		
1878	898	+1	899	8,219		
1879	269	+6	275	8,494		
1880	668	...	668	9,162		
1881	728	...	728	9,890	2,469	Marquis of Ripon.
1882	252	+7	259	10,149		
1883	359	—50	309	10,458		
1884	1,190	—17	1,173	11,631		
1885	651	+1	652	12,283	2,945	Earl of Dufferin and Ava.
1886	643	—34	609	12,892		
1887	1,212	—1	1,211	14,103		
1888	482	—9	473	14,576		
1889	1,326	—15	1,311	15,887	3,928	Marquis of Lansdowne.
1890	515	—1	514	16,401		
1891	997	—90	907	17,308		
1892	504	+3	507	17,815		
1893	689	...	689	18,504		
1894	409	—13	396	18,900	3,536	Earl of Elgin
1895	657	—10	647	19,547		
1896	706	+1	707	20,254		
1897	845	+16	861	21,115		
1898	898	+27	925	22,040		
1899	1,484	—1	1,483	23,523	4,916	Lord Curzon
1900	1,237	—8	1,229	24,752		
1901	576	+35	611	25,363		
1902	566	+2	568	25,931		
1903	1,029	—4	1,025	26,956		
					26,956	

Appendix 4.
Miles under construction.

APPENDIX 4.

(Appendix 5 in Report for 1902.)

Mileage under construction or sanctioned at the close of the Calendar year 1903 with additions to the 30th April 1904.

[Referred to in paragraphs 4 and 5 of Report.]

NOTE.—For references to the several mileage statements, see notes at head of Appendix 1.

Number. Main head.	Number. Sub-head.	Railway administration by which being constructed.	Name of owning Railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. 5′ 6″	3′ 3¾″	2′ 6″	2′ 0″	Remarks.
					Bhojudih to Hariharpur.	1st November 1901.	26·96	...	...	...	Work commenced.
					Bhojudih to Parthadihi.	1st November 1901.	2·28	...	...	...	Work commenced.
					Malkera to Mohuda	1st November 1901.	3·40	...	...	...	Work commenced
	(a)		Bengal-Nagpur	State line worked by company.	Junction with Sanetoria branch to Aldih.	20th December 1902.	2·47	...	...	...	Work commenced.
					Southern half of the Malkera-Katrasgarh cross connection.	1st November 1901.	0·71	...	...	...	Work commenced.
					Bauria to Fort Gloster.	25th June 1900.	2·00	...	...	...	Since opened.
2		Bengal-Nagpur.			Jamadhoba to Balliary.	24th June 1903.	5·50	...	...	...	Work commenced.
					Jubbulpore to Nainpur.	23rd January 1901.	...	...	68·01	...	Work commenced.
	(b)		Jubbulpore-Gondia Extension.	State line worked by company.	Nainpur to Mandla	23rd January 1901.	...	...	22·67	...	Not commenced.
					Nainpur to Chindwara.	23rd January 1901.	...	...	87·49	...	Portion since opened.
	(e)		Mohurbhanj*	Native state line worked by company.	Baripada Road station to Baripada.	18th July 1902.	...	...	32·10	...	Work commenced.
						Total ...	43·92	...	210·27	...	
	(k)		Rajputana-Malwa.	State line worked by company.	Rewari to Phulera .	20th December 1901.	...	133·32	...	...	Work commenced.
3	(m)	Bombay, Baroda and Central India.	Gaekwar's Dabhoi.	Native state line worked by company.	Mobha to Kanjat ...	24th January 1903.	...	...	6·49	...	Work commenced.
	(o)		Jaipur (Siwai-Madhopur).	Native state line worked by company.	Sanganer to Siwai Madhopur.	2nd December 1897.	...	72·85	...	...	Completion deferred for want of funds.
						Total ...	...	206·17	6·49	...	
					Panchooria to the river Ganges.	12th February 1896.	6·00	...	...	...	Constructed, but not worked.
	(a)		Eastern Bengal State.	State line worked by the State.	Kankurgachi chord	19th February 1902,	2·25	...	...	...	Work commenced.
					Ranaghat to Murshidabad.	20th June 1902.	75·00	...	...	...	Work commenced.
					Murshidabad to Jeaganj.	23rd September 1903.	6·00	...	...	...	Work commenced.
4		Eastern Bengal State.			Jeaganj to Lalgola.	23rd September 1903.	16·50	...	...	...	Work commenced.
	(c)		Eastern Bengal State.	State line worked by the State.	Golokganj to the Brahmaputra opposite Gauhati.	31st October 1902.	...	151·62	...	...	Work commenced.
					Kannia to Bonarpara.	17th July 1903.	...	44·25	...	...	Work commenced.
						TOTAL ...	105·75	195·87	...	...	
					Carried over ...	...	149·07	402·04	216·76	...	

* Question of working agency not yet finally settled.

APPENDIX 4—*contd.*

(Appendix 5 in Report for 1902.)

Mileage under construction or sanctioned at the close of the Calendar year 1903, with additions to the 30th April 1904.

(Referred to in paragraphs 4 and 5 of Report.)

NOTE.—For references to the several mileage statements, see notes at head of Appendix 1.

Number. Main head.	Number. Sub-head.	Railway administration by which being constructed.	Name of owning Railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Remarks.
					Brought forward .	...	149·07	402·04	216·76	...	
					Shikohabad to Farukhabad.	13th January 1898.	65·82	...	...	...	Work commenced.
					Tasra siding .	1st November 1901.	1·75	...	...	...	Work commenced.
					Mile 170¾ from Howrah on the Jharia branch to Chandore.	17th March 1903.	4·16	...	...	...	Work commenced.
5	(a)	East Indian ...	East Indian .	State line worked by company.	Manpur to 0·87 mile beyond Gurpa.	25th March 1902.	25·25	...	...	...	Work commenced.
					Mile 0·87 beyond Gurpa to Kodarma.	20th June 1902.	18·19	...	...	...	Work commenced.
					Kodarma to Hariharpur.	20th June 1902.	56·35	...	...	...	Work commenced.
					Ondal to Sainthia	1st December 1903.	43·62	...	...	...	Work commenced.
						Total .	215·14	...	...	...	
6	(f)	Great Indian Peninsula.	Gwalior Light	Native state line worked by company.	Gwalior to Sabulgarh.	2nd October 1901.	...	...	...	57·86	Portion since opened.
	(g)		Agra-Delhi Chord.	State line worked by company.	Agra to Delhi .	15th September 1898.	120·10	...	...	...	Work commenced.
						Total .	120·10	...	...	57·86	
	(a)		Madras . .	Guaranteed under terms of the old contracts.	Cannanore to Azhikal.	6th May 1897	3·90	...	...	...	Since opened.
	(c)		Madras (North-East line).	State line worked by company.	Korrukkupettai to Basin Road.	11th April 1901.	0·93	...	...	...	Work commenced.
	(d)		Nilgiri . .		Coonoor to Ootacamund.	6th November 1903.	...	11·50	...	...	Not commenced.
7	(f)	Madras ...	Azhikal-Mangalore.		Azhikal to Mangalore.	28th June 1901	77·27	...	...	...	Work commenced.
	(g)		Salem-Attur .		Salem to Attur .	16th September 1903.	36·06	...	...	...	Commencement of work not yet authorized.
	(h)		Morappur-Dharmapuri.		Morappur to Dharmapuri.	24th October 1902.	...	...	18·36	...	Work commenced.
	(i)		Tirupattur-Krishnagiri.		Tirupattur to Krishnagiri.	24th October 1902.	...	...	25·43	...	Work commenced.
						Total .	118·16	11·50	43·79	...	
					From a point 12 miles south of Quetta to Nushki	6th August 1902.	82·50	...	...	...	Work commenced.
	(a)		North Western State.	State line worked by the State.	Hyderabad to Badin	15th May 1903	62·00	...	...	...	Work commenced.
					Sargoda to Shorkot Road.	23rd September 1903.	103·00	...	...	...	Work commenced.
	(e)		Southern Punjab.	Branch line company assisted under rebate terms.	Ludhiana to MacLeodganj.	10th November 1903.	156·40	...	...	...	Work commenced.
9	(i)	North Western State.	Jullundur-Kapurthala-Sultanpur (British section).	State line worked by the State.	Jullundur to the British Frontier.	7th August 1903.	...	...	6·80†	...	Commencement of work not yet authorised.
	(j)		Jullundur-Kapurthala-Sultanpur (Native state section).	Native state line worked by the State.	Sultanpur to the British Frontier.	7th August 1903.	...	...	22·02†	...	Commencement of work not yet authorised.
						Total .	403·90	...	28·82	...	
					Allahabad to Siwait	8th November 1901.	11·25	...	...	...	Portion since opened.
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	State line worked by the State.	Sultanpur to Fyzabad.	8th November 1901.	36·37	...	...	...	Since opened.
					Meerut to Hapur .	3rd April 1903	19·50	...	...	...	Work commenced.
					Phaphamau to Zafarabad.	2nd October 1903.	57·50	...	...	...	Not commenced.
						Total .	124·62	...	...	...	
					Carried over ...	...	1,13[illegible]·99	413·54	289·37	57·86	

† Question of gauge not yet finally settled.

Appendix 4.
Miles under construction.

APPENDIX 4—*contd.*

(Appendix 5 in Report for 1902.)

Mileage under construction or sanctioned at the close of the Calendar year 1903, with additions to the 30th April 1904.

(Referred to in paragraphs 4 and 5 of Report.)

NOTE.—For references to the several mileage statements, see notes at head of Appendix 1.

Number. Main head.	Number. Sub-head.	Railway administration by which being constructed.	Name of owning railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. 5′ 6″	3′ 3¾″	2′ 6″	2′ 0″	Remarks.
					Brought forward...	...	1130·99	413·54	289·37	57·86	
					Aunrihar to Jaunpur.	1st November 1902.	...	36·14	...	...	Since opened.
	(a)		Bengal and North-Western.	Assisted company receiving land only from Government.	Kopaganj to Dohrighat.	28th April 1903.	...	21·70	...	...	Since opened.
					Uska Bazar to Tulsipur.	31st March 1903.	...	53·54	...	...	Work commenced.
12		Bengal and North-Western.			Gaisanri to Jarwa .	31st March 1903.	...	12·56	...	...	Work commenced.
					Gorakhpur to Bagaha.	31st March 1903.	...	60·94	...	...	Not commenced.
					Sakri to Jainagar .	1st June 1899	...	30·47	...	...	Work commenced.
					Mansi to Baptishi	23rd September 1903.	...	60·37	...	...	Work commenced.
	(c)		Tirhoot State .	State line worked by company.	Sikurna to Murliganj	23rd September 1903.	...	18·61	...	...	Work commenced.
					Bairagnia to Biknathori.	23rd September 1903.	...	79·55	...	...	Work commenced.
					Bettiah to Bagaha	23rd September 1903.	...	49·35	...	...	Work commenced.
						Total , .	...	423·23	...	...	
15	(a)	Burma ...	Burma ...	State line worked by company.	Pegu to Martaban	27th November 1903.	...	121·27	...	...	Commencement of work not yet authorised
19	(a)	Rohilkund and Kumaon.	Rohilkund and Kumaon.	Assisted company, subsidized by the Government of India.	Bareilly to Soron .	3rd July 1903	...	56·00	...	...	Work commenced.
					Moradabad to Ramnagar.	3rd July 1903	...	47·00	...	...	Not commenced.
					Lalkua to Kashipur	3rd July 1903	...	45·00	...	...	Not commenced.
						Total ...	...	148·00	...	...	
	(e)		South Indian .	State line worked by company.	Tiruppachetti to Sivagunga.	21st April 1899.	...	9·00	...	...	Not commenced.
					Arantangi Quarry branch.	15th November 1900.	...	3·90	...	...	Work commenced.
	(d)		Tanjore District Board.	District Board line.	Adirampatnam Salt siding.	15th November 1900.	...	1·00	...	...	Not commenced.
20		South Indian			Thambikkottai Salt siding.	15th November 1900.	...	0·63	...	...	Not commenced.
	(e)		Tinnevelly-Quilon (Travancore) (British section).	State line worked by company.	...	21st April 1899.	...	0·91	...	...	Work commenced.
	(f)		Tinnevelly-Quilon (Travancore) (Native state section).	Native state line worked by company.	Quilon to the British frontier near Shencottah.	21st April 1899.	...	57·62	...	...	Work commenced.
						Total . .	...	73·06	...	...	
21	(i)	Southern Mahratta.	Bellary-Rayadrug.	State line worked by company.	Bellary to Rayadrug.	24th October 1902.	...	33·00	...	...	Work commenced.
	(j)		Hospet-Kottur	State line worked by company.	Hospet to Kottur .	24th October 1902.	...	44·10	...	...	Work commenced.
						Total . .	...	77·10	...	...	
23	(a)	Baraset-Basirhat Light.	Baraset-Basirhat Light.	Assisted company subsidized by District Board.	Baraset to Basirhat	3rd April 1903.	...	...	26·00	...	Work commenced.
24	(a)	Barsi Light .	Barsi Light .	Assisted company receiving land only from Government.	Barsi Road Jn. to Pandharpur.	6th January 1898.	...	...	30·67	...	Not commenced.
					Barsi Town to Tadwala.	20th November 1900.	...	...	26·70	...	Not commenced.
						Total . .	...	...	57·37	...	
26	(a)	Cutch . .	Cutch . .	Line owned and worked by native state.	Anjar to Tuna .	26th August 1903.	...	...	11·86	...	Work commenced.
27	(a)	Dwara-Therria Light.	Dwara-Therria Light.	Assisted company, receiving land only from Government.	Dwara to Maolong	15th May 1902	...	...	13·50	...	Work commenced.
					Maolong to Therria Ghat.	15th May 1902.	...	...	6·00	...	Commencement of work not yet authorised.
						Total .	...	...	19·50	...	
					Ammayanayakkanur to Kotagudi.	30th May 1899.	...	...	55·00	...	Not commenced.
29	(a)	Madura District Light.	Madura District Light.	Assisted company subsidized by District Board.	Perriyakulam to Krishna Manaik's Tope.	30th May 1899.	...	...	5·00	...	Not commenced.
					Theni to Karuvanath.	30th May 1899.	...	...	33·00	...	Not commenced.
						Total . .	...	...	93·00	...	
					Carried over ...	...	1130·99	1256·20	497·10	57·86	

APPENDIX 4—*concld.*

(Appendix 5 in Report for 1902.)

Mileage under construction or sanctioned at the close of the Calendar year 1903, with additions to the 30th April 1904.

[Referred to in paragraphs 4 and 5 of Report.]

NOTE.—For references to the several mileage statements, see notes at head of Appendix 1.

Number. Main head.	Number. Sub-head.	Railway administration by which being constructed.	Name of owning Railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	Mileage sanctioned and still remaining to be constructed. 5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	Remarks.
					Brought forward ...	...	1,130·99	1,256·20	497·10	57·86	
32	(a)	Shahdara-Saharanpur Light.	Shahdara-Saharanpur Light	Assisted company receiving land only from Government.	Shahdara to Saharanpur.	4th January 1902.	...	...	95·00	...	Not commenced.
					Baraut to Meerut	4th January 1902.	...	...	30·00	...	Not commenced.
					Total	...	...	...	125·00	...	
33	(a)	Bengal Provincial Light.	Tarakeshwar-Magra Light.	Unassisted company	Magra to Tribeni...	...	...	...	2·15	...	Since opened.
					Jagatballubpur to Antpur.	20th March 1902.	...	...	...	8·50	Work commenced.
37	(a)	Howrah-Amta Light.	Howrah-Amta Light.	Assisted company, subsidized by District Board.	Antpur to Champadanga.	20th March 1902.	...	...	...	9·00	Commencement of work not yet authorized.
					Antpur to Rajbulhat.	20th March 1902.	...	...	...	3·50	Commencement of work not yet authorized.
					...						
					Total	...	...	...	...	21·00	
					Total mileage sanctioned and still remaining to be constructed on the 31st December 1903.		1,130·99	1,256·20	624·25	78·86	
					...						
					MILEAGE SANCTIONED FROM 1st JANUARY TO 31st MARCH 1904.						
5	(a)	East Indian ...	East Indian ...	State line worked by company.	Khurja to Hapur	13th January 1904.	38·37	...	...	...	Not commenced.
6	(a)	Great Indian Peninsula.	Great Indian Peninsula.	State line worked by company.	Warora to Bellarpur	22nd January 1904.	37·90	...	...	...	Work commenced.
	(f)		Gwalior Light	Native State line worked by company.	Sabulgarh to Sheopur.	9th February 1904.	...	...	...	65·00	Not commenced.
					Total mileage sanctioned from 1st January to 31st March 1904		76·77	...	...	65·00	
					MILEAGE SANCTIONED FROM 1st TO 30th APRIL 1904.						
15	(a)	Burma . .	Burma . .	State line worked by company.	Henzada to Kyangin.	19th April 1904.	...	65·66	...	...	Not commenced.
18	(a)	Jodhpur-Bikaner.	Jodhpur . .	Line owned and worked by native state.	Merta Road to Merta City.	29th April 1904.	...	8·95	...	...	Not commenced.
					Total mileage sanctioned from 1st to 30th April 1904		...	74·61	...	...	

Appendix 5.

Sterling Capital authorized.

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*(Appendix 8 in

Capital authorized to be raised for each Guaranteed railway, State line leased to companies, and Rail- 31st Decem-

(Referred to in paragraph

Numbers. Main head.	Numbers. Sub-head.	Railways.	Amount authorized to be raised by the Companies up to the 31st December 1903. Share Capital.	Debentures.	Debenture stock.	Total.	Amount raised by the Companies and tary of State in England to the Share Capital.	*Debentures.* Cash received.	*Debenture stock.* Cash received.
			£	£	£	£	£	£	£
		Guaranteed.							
3	(a)	Bombay, Baroda and Central India	7,550,300	2,960,400	...	10,510,700	7,528,628	2,959,125	...
7	(a)	Madras	10,257,630	1,562,900	...	11,820,530	† 10,257,630	1,561,618	...
		Total	17,807,930	4,523,300	...	22,331,230	17,786,258	4,520,743	...
		State lines leased to Companies.							
1	(a)	Bengal Central	500,000	‡500,000	...	1,000,000	§ 500,000	...	...
2	(a)	Bengal-Nagpur	3,000,000	1,700,000	...	4,700,000	‖ 3,000,000	1,693,703	..
	(b)& (d)	Do. Extension	...	2,805,000	...	2,805,000	...	2,802,625	...
6	(e)	Indian Midland	3,000,000	3,654,100	...	6,654,100	‖ 3,000,000	3,651,994	...
11	(a)	Assam-Bengal	1,500,000	1,355,900	...	2,855,900	‡‡ 1,500,000	1,353,650	...
19	(b)	Lucknow-Bareilly section (Rohilkund and Kumaon)	...	147,000	...	147,000	...	**147,000	...
21	(a)	Southern Mahratta	3,500,000	1,193,100	...	4,693,100	§ 3,491,540	1,192,350	...
21	(g)	Mysore section (Southern Mahratta)	...	...	1,200,000	1,200,000	...	...	‖ 1,200,000
15	(a)	Burma	2,000,000	...	1,250,000	3,250,000	§§ 2,000,000	...	1,199,819
		Total	13,500,000	11,355,100	2,450,000	27,305,100	13,491,540	10,841,322	2,399,819
		Branch Lines.*							
3	(g)	Ahmedabad-Dholka	86,667	...	...	86,667	...	...	...
3	(h)	Ahmedabad-Parantij	133,333	...	...	133,333	...	...	...
4	(b)	Brahmaputra-Sultanpur	187,325	...	...	187,325	...	...	...
10	(b)	Hardwar-Dehra	200,000	...	...	200,000	...	...	...
4	(d)	Mymensingh-Jamalpur-Jagannathganj	146,748	...	...	146,748	...	...	...
5	(c)	South Behar	400,000	...	290,000	690,000	...	...	...
3	(f)	Tapti-Valley	993,333	...	40,000	1,033,333	...	...	...
		Total	2,147,406	...	330,000	2,477,406	...	...	...
		GRAND TOTAL	33,455,336	15,878,400	2,780,000	52,113,736	31,277,798	15,362,065	2,399,819

* These have a rupee capital and an Indian domicile, except the South Behar Railway which has a sterling capital and an English domicile.

Details of Debenture loans on 31st December 1903 and the dates at which the loans expire.

Bombay, Baroda and Central India Railway—

£		
100,000	2½ per cent.	1st April 1904.
120,000	3½ „ „	1st February 1905.
100,700	5 „ „	8th July 1905.
536,000	3 „ „	1st December 1905.
149,400	3½ „ „	15th June 1906.
180,000	3½ „ „	10th July 1906.
100,500	3½ „ „	8th January 1907.
320,000	3½ „ „	10th January 1907.
500,000	3½ „ „	30th June 1907.
198,800	3½ „ „	8th July 1908.
300,000	3½ „ „	7th November 1908.
300,000	3½ „ „	1st January 1909.
55,000	3¼ „ „	5th May 1910.
2,960,400		

Madras Railway—

£		
103,100	2½ per cent.	30th June 1904.
300,000	3½ „ „	30th June 1904.
100,000	3 „ „	31st December 1905.
111,500	3 „ „	30th June 1906.
140,000	3½ „ „	30th June 1906.
145,000	3½ „ „	31st December 1906.
100,000	3½ „ „	30th April 1907.
54,200	3¾ „ „	30th June 1907.
200,000	3½ „ „	31st October 1907.
81,400	3½ „ „	31st December 1907.
53,300	3½ „ „	31st December 1907.
174,400	3¼ „ „	30th June 1909.
1,562,900		

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Report for 1902.)

Appendix 5.

Sterling Capital authorized.

way constructed under the "Branch Line" terms, the amount raised and the amount withdrawn to ber 1903.

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ADVANCED BY THE SECRE- 31ST DECEMBER 1903.		AMOUNT RAISED IN INDIA TO THE 31ST DECEMBER 1903.			TOTAL AMOUNT WITH- DRAWN TO THE 31ST DECEMBER 1903.		REMARKS.
Capital not bearing interest (premium).	Advances made to companies from money raised under Act 51, Vict., Cap. 5.	Share Capital.	Capital not bearing interest (premium).	Total amount raised to the 31st December 1903.	During calendar year 1903.	Up to the close of calendar year 1903.	
£	£	£	£	£	£	£	
28,766	...	*21,672	...	10,338,191	123,659	10,906,461	* 5 per cent.
7,274	...	...	...	11,826,522	116,994	12,283,613	† 5 „ „ . . . . £3,757,670 4½ „ „ . . . . „ 999,960 4½ „ „ . . . . „ 500,000
36,040	...	21,672	...	22,364,713	240,653	23,195,074	
...	500,000	...	...	1,000,000	5,091	1,018,259	‡ Replaced by advances raised under Act 51, Vict., Cap. 5.
8,150	2,760,000	...	...	7,461,853	67,830	¶7,859,190	§ 3½ per cent.
9,450	...	...	...	2,812,075	1,214,732	7,566,546	‖ 4 „ „
—5,977	1,845,000	...	...	7,991,017	234,574	8,506,656	¶ Includes expenditure by the State on the Katni-Umaria section, which is equivalent to £323,589.
15,385	...	...	...	2,869,035	...	2,869,035	** £147,000 sterling debentures were issued by the Company in England and sold for Rs. 20,34,195. This sum was paid into the Calcutta Treasury and at the contract rate is equivalent to a sterling payment of £160,637. Expenditure in excess of this capital has been advanced in India.
...	...	...	...	147,000	13,726	** 450,609	
30,923	2,129,900	8,460	34	††6,853,207	28,120	††6,767,570	†† Includes capital raised for completion of the Bellary-Kistna section, and expenditure thereon from the 1st January 1888.
24,000	...	...	...	1,224,000	14,931	1,216,060	
...	...	...	...	3,199,819	207,183	3,303,347	‡‡ 3 per cent.
81,931	6,734,900	8,460	34	33,558,006	1,786,237	39,559,272	§§ 2½ „ „
...	...	73,048	...	73,048	19,381	(l) 66,312	(l) Inclusive of £9,474 (Rs. 1,42,116) expended direct by the Company.
...	...	130,000	2,667	(a) 132,667	1,257	(a) 132,591	(a) Inclusive of £9,809 (Rs. 1,40,147) being outlay incurred direct by the Company.
...	...	198,722	...	(b) 198,722	1,633	(b) 196,166	(b) Inclusive of £12,219 (Rs. 1,83,292) being outlay incurred direct by the Company.
...	...	189,667	...	189,667	537	(c) 189,636	(c) Inclusive of £14,524 (Rs. 2,17,857) being expenditure direct by the Company.
...	...	156,496	...	(d) 156,496	2,883	(g) 155,261	(d) Including a loan from the Managing Agents of the Company.
...	...	(e) 669,580	15,000	684,580	885	(f) 736,936	(g) Inclusive of £8,516 (Rs. 1,27,744) being outlay incurred direct by the Company.
...	...	(h) 872,537	17	872,554	2,121	(i) 866,827	(e) Including Debenture Stock amounting to £290,000.
							(f) Equivalent to Rs. 1,20,01,897 and including £316,466 (Rs. $2,1$,073) expended direct by the Company in England, and £52,737 (Rs. 7,92,809) advanced to the Company in India.
...	...	2,290,050	17,684	2,307,734	28,697	2,344,279	(h) Including Debenture Stock amounting to £39,203 (Rs. 5,88,049).
							(i) Inclusive of £78,017 (Rs. 11,70,261) being outlay incurred direct by the Company.
117,971	6,734,900	2,320,182	17,718	58,230,453	2,055,587	65,098,625	

Bengal-Nagpur Railway—

£		
400,000	2½ per cent.	21st April 1904.
400,000	3 „ „	18th August 1905.
400,000	3 „ „	15th June 1906.
109,300	3½ „ „	10th July 1906.
390,700	3½ „ „	10th January 1907.
448,900	3¼ „ „	18th February 1907.
155,000	3½ „ „	3rd January 1908.
400,000	3½ „ „	4th May 1908.
265,600	3¼ „ „	18th February 1909.
750,000	3¼ „ „	1st June 1909.
785,500	3¼ „ „	18th February 1910.
4,505,000		

Indian Midland Railway—

£		
1,000,000	3¾ per cent.	30th June 1904.
150,000	3 „ „	30th June 1905.
582,900	3½ „ „	30th June 1906.
390,000	3¾ „ „	31st December 1906
610,000	3¾ „ „	30th June 1907.
421,200	3¼ „ „	31st December 1907.
500,000	3½ „ „	3rd October 1908.
3,654,100		

Lucknow-Bareilly Railway—

£		
£147,000 . . .	3¾ per cent.	1st July 1904.

Southern Mahratta Railway—

£		
100,000	2½ per cent. . . .	1st April 1904.
88,100	3 „ „ . . .	1st October 1905.
600,000	3 „ „ . . .	1st April 1906.
50,000	3½ „ „ . . .	1st October 1907.
255,000	3½ „ „ . . .	1st October 1908
100,000	3¼ „ „ . . .	31st May 1909.
1,193,100		

Assam-Bengal Railway—

£		
300,000	2½ per cent. . . .	13th April 1905.
560,000	3½ „ „ . . .	4th July 1907.
495,900	3½ „ „ . . .	4th July 1909.
1,355,900		

Appendix 6.
Budget allotments.

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(Appendix 9 in

Amount allotted to each Railway Administration for expenditure on capital account

Referred to in paragraph

Class : No. Railway.	1 (a). Bengal Central.					2 (a), (b) and (d). Bengal-Nagpur.					3 (a). Bombay, Baroda and
Particulars. Year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.
1894-95	5,58,000	62,000	58,000	59,730	...	8,78,000	6,48,000	3,16,000	3,38,482	...	15,95,000	9,75,000	17,70,000
1895-96	5,96,000	1,01,000	55,000	56,662	...	7,07,000	6,94,000	29,98,000	21,12,011	...	30,40,000	25,50,000	28,13,000
1896-97	17,42,000	7,35,000	9,94,000	9,66,582	...	2,55,84,000	1,69,64,000	1,55,77,000	1,57,92,396	...	39,75,000	47,11,000	31,02,000
1897-98	14,83,000	7,00,000	6,79,000	6,57,068	...	3,82,23,000	2,12,84,000	1,94,00,000	1,84,68,149	...	50,00,000	67,46,000	27,00,000
1898-99	27,10,500	4,00,000	7,81,000	6,16,262	...	2,37,56,000	2,07,00,000	1,86,10,000	1,84,49,088	323·53	53,50,000	66,43,000	45,91,000
1899-1900	16,60,000	4,00,000	4,00,000	1,07,764	...	2,35,10,000	1,77,00,000	1,77,00,000	1,70,70,994	5·75	49,00,000	41,00,000	51,81,000
1900-01	2,63,000	2,50,000	2,50,000	2,36,634	...	1,47,72,000	1,05,00,000	81,04,000	70,91,187	92·54	41,50,000	10,00,000	13,98,000
1901-02	3,03,000	1,50,000	1,78,000	1,78,232	...	1,83,39,000	1,74,51,000	1,60,39,000	1,44,06,124	2·25	30,25,000	28,00,000	37,72,000
1902-03	2,74,000	2,00,000	2,41,000	1,93,616	...	2,84,45,000	2,98,09,000	1,74,92,000	1,75,19,834	120·00	16,25,000	16,25,000	33,09,000
1903-04	66,000	66,000	50,000	...	...	2,55,20,000	1,27,00,000	1,83,44,000	...	143·61	28,45,000	8,45,000	23,21,000

	5 (a). East Indian.					6 (a) and (g). Great Indian Peninsula.					6 (b) and (c) Indian
1894-95	66,20,000	24,00,000	35,41,000	38,82,382	58·97	15,38,000	15,01,000	17,33,000	16,58,250	...	12,99,810	22,07,000	9,25,000
1895-96	56,70,000	31,00,000	55,50,000	52,11,142	23·32	15,46,000	10,73,000	6,70,000	5,69,796	...	3,50,700	2,86,000	8,89,000
1896-97	1,00,00,000	11,22,000	68,00,000	64,94,213	4·81	16,03,000	16,35,000	—3,43,000	—4,90,409	1·07	1,00,66,980	96,07,000	63,14,000
1897-98	1,30,00,000	1,05,00,000	1,20,00,000	1,28,94,201	1·25	12,90,000	40,47,000	14,24,000	15,45,812	...	33,55,000	26,01,000	29,24,000
1898-99	1,50,00,000	1,62,65,000	1,45,00,000	1,25,59,624	5·61	45,75,000	63,64,000	30,73,000	28,57,021	...	33,00,000	20,10,000	20,84,000
1899-1900	1,88,00,000	1,50,00,000	1,95,00,000	1,98,82,502	125·48	45,45,000	45,34,000	30,09,000	28,74,659	19·00	19,59,000	17,50,000	23,48,000
1900-01	1,87,50,000	1,28,28,000	1,69,70,000	1,68,96,566	3·23	37,69,000	19,56,000	—29,81,000	36,93,175	51·06	22,46,000	7,50,000	17,79,000
1901-02	1,87,50,000	1,87,50,000	1,47,51,000	1,42,15,020	...	18,42,000	12,63,000	8,16,000	3,73,378	...	35,80,000	33,50,000	27,40,000
1902-03	1,87,50,000	1,87,50,000	1,42,00,000	1,33,96,937	87·75	21,20,000	2,30,000	16,25,000	34,87,683	...	32,48,000	39,15,000	14,74,000
1903-04	1,87,50,000	1,57,50,000	1,87,50,000	...	4·46	1,35,20,000	1,35,20,000	77,85,000	...	...	29,27,000	29,27,000	36,58,000

	10 (a) to (c). Oudh and Rohilkhand State.					11 (a). Assam Bengal.					12 (c). Bengal and North-Western
1894-95	31,71,000	22,29,000	27,18,000	25,18,142	56·07	1,08,24,000	82,95,000	1,67,75,000	1,66,51,385	...	10,36,000	8,00,000	5,05,000
1895-96	44,96,000	30,42,000	30,61,000	28,23,376	...	2,09,58,000	1,47,17,000	1,43,83,000	1,37,36,608	158·90	7,71,000	7,00,000	6,03,000
1896-97	32,75,000	33,34,000	34,77,000	31,81,947	49·76	2,34,55,000	1,75,00,000	1,17,06,000	1,15,55,591	201·73	4,06,000	43,25,000	24,41,000
1897-98	51,10,000	51,16,000	52,72,000	53,53,810	45·93	1,98,55,000	1,33,00,000	1,20,94,000	1,16,21,159	...	73,11,000	71,00,000	53,50,000
1898-99	32,35,000	33,95,000	54,59,000	44,30,096	138·39	1,44,15,000	1,15,20,000	1,20,24,000	1,24,02,607	53·82	59,50,000	62,00,000	40,70,000
1899-1900	71,35,000	54,73,000	56,75,000	59,81,021	32·05	1,24,00,000	80,00,000	1,00,36,000	1,01,54,508	20·31	35,01,000	24,00,000	30,00,000
1900-01	40,86,000	30,38,000	29,79,000	29,63,018	86·77	1,26,92,000	1,26,10,000	91,60,000	90,20,828	142·20	47,86,000	33,38,000	50,88,000
1901-02	20,44,000	18,31,000	25,91,000	23,94,195	...	83,72,000	83,45,000	75,00,500	70,47,915	10·75	30,46,000	25,46,000	27,46,000
1902-03	49,78,000	98,78,000	47,42,000	99,24,989	...	67,34,000	62,04,000	72,44,000	67,19,788	54·50	31,85,000	21,20,000	33,65,000
1903-04	69,25,000	40,28,000	76,28,000	...	76·57	21,10,000	20,00,000	36,48,000	...	96·70	66,37,000	65,00,000	28,68,000

	East Coast State.					19 (b). Rohilkund and Kumaon (Lucknow-Bareilly section).					20 (a), (e) and (f) South Indian
1894-95	99,66,000	76,10,000	78,55,000	83,21,931	90·71	2,75,000	3,89,000	1,66,000	1,11,826	1·75	17,74,000	6,00,000	2,00,000
1895-96	53,00,000	53,00,000	87,30,000	87,63,511	137·37	2,20,000	2,05,000	3,08,000	2,09,454	...	14,96,000	8,50,000	4,50,000
1896-97	1,03,78,000	99,78,000	1,15,66,000	1,10,42,010	47·15	4,96,000	3,43,000	2,37,000	2,06,608	...	6,15,000	5,00,000	1,50,000
1897-98	1,06,30,000	1,05,20,000	90,73,000	89,48,642	2·66	3,25,000	2,28,000	4,48,000	3,57,554	...	8,35,000	5,00,000	—2,70,000
1898-99	85,16,000	90,44,000	89,58,000	88,66,088	232·32	2,20,000	1,50,000	1,53,000	1,28,139	...	—14,70,000	—18,44,000	—20,00,000
1899-1900	29,55,000	27,00,000	30,95,000	29,09,719	...	1,60,000	69,000	69,000	—2,969	...	5,00,000	5,00,000	10,93,000
1900-01	34,29,000	14,00,000	11,40,000	...	7·16	1,12,000	3,74,000	3,74,000	3,63,582	...	60,00,000	13,00,000	43,12,000
1901-02	*	*	*	*	*	2,95,000	2,95,000	4,00,000	4,36,258	...	1,28,44,000	1,16,44,000	91,37,000
1902-03	*	*	*	*	*	13,40,000	11,40,000	9,88,000	9,34,853	...	53,00,000	53,00,000	52,93,000
1903-04	*	*	*	*	*	54,000	54,000	3,84,000	...	5·87	20,82,000	19,92,000	42,85,000

NOTE.—(1) The credit items represent the amounts by which credits under suspense and on account of capital outlay
(2) Only the figures for the years 1902-03 and 1903-04 include information relating to Frontier Reserve material, "Stores"

* Transferred partly to the Bengal-Nagpur
† For amounts of special items included in these figures and
‡ Includes Rs. 60,00,000 for purchase of lines, Rs. 3,000 for
§ Includes Rs 1,25,17,000 for special
|| Includes a credit of Rs. 21,000 for Warora Colliery
** Includes Rs. 65,714 for Bezwada extension and Sabarmati-Dholka and

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Appendix 6.
Budget allotments.

during each official year from 1894-95 and the amount actually expended.

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Central India.		3 (b), (f) and (k), Rajputana-Malwa.					4 (a), (b), (c) and (e). Eastern Bengal State.					Class No. Railway.
Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Particulars.
												Year.
16,65,198	...	30,45,000	23,20,000	38,34,000	30,50,064	...	21,75,000	9,00,000	6,45,000	6,02,680	...	1894-95
27,55,585	...	40,20,000	34,50,000	26,74,000	28,65,244	...	13,00,000	12,00,000	14,16,000	14,25,285	...	1895-96
28,33,994	...	16,40,000	14,44,000	3,47,000	—62,693	25·81	40,00,000	40,75,800	45,59,000	42,79,950	...	1896-97
25,51,368	...	9,52,000	6,55,000	1,50,000	1,27,824	...	69,14,000	71,25,000	49,33,000	56,02,739	...	1897-98
40,21,367	...	17,41,000	15,00,000	6,63,000	—1,15,096	...	1,07,69,000	66,57,000	39,33,000	33,05,840	9·49	1898-99
41,40,383	...	23,65,000	9,00,000	18,00,000	11,50,566	...	78,39,000	64,97,000	53,45,000	54,50,381	32·82	1899-1900
14,72,253	...	30,80,000	12,00,000	27,44,000	20,89,502	...	97,60,000	61,56,000	51,95,000	43,96,069	53·84	1900-01
38,24,269	...	28,14,000	21,28,000	14,91,000	15,05,915	...	96,08,000	77,60,000	82,01,000	82,33,190	6·97	1901-02
23,41,406	...	34,14,000	30,61,000	24,04,000	24,55,629	54·25	1,14,30,000	90,99,000	42,78,000	77,13,349	36·75	1902-03
...	43·67	54,15,000	46,00,000	28,35,000	...	...	1,76,24,000	1,17,88,000	1,25,95,000	...	0·98	1903-04
Midland.		**7 (a), (c), (d) and (f). Madras.**					**9 (a), (f) and (g). North Western State.**					
7,38,722	...	11,44,000	6,16,000	3,93,050	1,88,902	...	29,91,000	91,21,000	1,31,30,000	1,14,89,843	...	1894-95
4,86,315	1·77	5,98,731	2,63,000	3,41,000	2,89,454	8·55	1,67,00,000	1,33,27,000	1,55,38,000	1,53,73,545	103·29	1895-96
70,19,372	...	6,31,700	5,66,000	6,02,000	4,35,779	...	1,33,93,000	1,37,84,000	1,51,27,000	1,55,72,773	263·38	1896-97
30,13,399	47·63	11,17,000	12,18,000	2,78,000	3,05,723	...	81,88,000	88,10,000	65,62,000	57,18,432	...	1897-98
19,24,558	68·21	45,88,000	55,05,000	9,07,000	7,79,654	...	76,67,000	89,46,000	77,21,000	73,18,184	...	1898-99
19,97,374	...	16,00,000	26,04,000	20,26,000	16,06,789	...	51,99,000	54,24,000	46,77,000	43,87,895	124·61	1899-1900
13,15,242	...	60,73,000	31,13,000	39,47,000	43,77,502	...	92,49,000	42,88,000	64,06,000	62,50,302	118·13	1900-01
28,06,847	...	46,78,000	47,00,000	41,25,000	37,31,500	28·75	85,61,000	68,87,000	89,15,000	83,94,914	...	1901-02
15,10,272	...	68,25,000	52,00,000	58,54,000	54,46,013	78·75	92,92,000	90,26,000	17,19,000	1,14,92,941	31·00	1902-03
...	8·50	1,23,10,000	1,16,90,000	62,27,000	...	15·72	1,77,25,000	1,29,23,000	86,89,000	...	108·28	1903-04
(Tirhoot section).		**15 (a). Burma.**					**18 (c). Jodhpur-Bikaner [Jodhpur-Hyderabad (British section)].**					
2,58,104	...	36,31,000	36,28,000	33,93,000	33,48,504	15·46	...	...	...	...	...	1894-95
5,08,232	...	15,54,700	11,11,000	16,09,000	16,71,732	141·07	...	...	...	...	...	1895-96
16,59,234	...	8,75,000	75,28,000	71,53,000	66,22,514	...	...	...	...	...	...	1896-97
47,24,254	...	77,10,000	77,10,000	55,16,000	52,35,328	50·00	...	...	25,000	7,987	...	1897-98
34,38,341	...	99,50,000	1,00,00,000	70,00,000	72,12,253	...	23,75,000	1,00,000	10,03,000	9,70,553	...	1898-99
32,77,918	73·17	1,18,13,000	80,00,000	78,00,000	78,14,728	57·21	24,81,000	9,96,000	10,04,000	9,42,349	...	1899-1900
53,92,450	92·18	1,02,85,000	88,00,000	97,35,000	98,58,957	130·66	17,93,000	10,00,000	3,98,000	3,83,059	68·49	1900-01
25,89,442	11·36	1,22,00,000	96,74,000	95,64,000	92,05,122	53·70	5,000	1,58,000	2,25,000	1,28,892	...	1901-02
31,55,242	66·00	1,00,00,000	54,50,000	58,50,000	58,11,768	133·25	59,500	40,000	69,000	58,141	88·00	1902-03
...	...	72,52,000	47,52,000	29,53,000	...	25·53	...	9,000	3,000	...	...	1903-04
		21 (a), (c) and (g). Southern Maratta.					**Total.**					
1,85,032	...	8,40,000	14,09,000	7,31,000	6,81,342	...	5,33,80,810	4,57,01,000	5,36,03,050	5,57,60,019	220·96	1894-95
3,82,340	...	11,77,000	12,62,000	8,12,000	7,55,237	...	7,05,01,191	5,29,32,000	6,29,60,000	6,02,00,529	574·27	1895-96
1,49,527	...	15,01,000	14,78,000	9,80,000	9,04,203	...	11,38,36,680	9,97,19,000	9,12,59,000	8,82,53,584	590·21	1896-97
—3,01,266	...	19,70,000	18,07,000	9,22,000	8,17,542	...	13,32,68,000	10,97,61,000	8,94,89,000	8,79,43,225	146·77	1897-98
—19,58,792	...	18,66,000	15,20,000	7,95,000	8,12,707	...	12,45,14,500	11,50,75,000	9,43,75,000	8,81,38,509	831·37	1898-99
10,48,002	4·49	9,65,000	6,00,000	4,75,000	4,60,852	...	11,42,97,000	8,76,41,000	9,42,30,000	9,12,64,433	494·99	1899-1900
38,97,339	1·45	12,10,000	6,00,000	6,06,000	7,32,960	...	11,65,05,000	7,30,34,000	8,30,75,000	8,08,35,467	347·71	1900-01
98,12,176	...	8,25,000	6,00,000	4,26,000	1,36,593	...	11,08,99,000	†10,32,44,000	†9,38,55,500	8,90,29,982	113·78	1901-02
51,94,660	128·00	10,70,000	10,70,000	6,99,000	3,75,323	...	11,80,82,500	‡11,00,00,000	‡10,34,58,000	**10,65,75,960	878·25	1902-03
...	30·89	14,48,000	13,45,000	2,05,000	...	...	‖15,01,88,000	§12,00,00,000	¶9,82,07,000	...	560·77	1903-04

transferred from one railway system to another exceed the amounts allotted and expended on works of construction.
and "Collieries."
railway and partly to the Madras railway from the 1st January 1901.
not included in the detailed statement see report for 1902.
Bezwada extension, and a credit of Rs. 25,000 for Warora Colliery.
items not included in the statement.
not included in the statement.
a credit of Rs. 2,22,198 not taken into account in the detailed statement.

Appendix 7.
Annual Capital outlay.

APPEN
(Appendix 10 in
Capital expenditure in thousands of rupees

(Referred to in paragrpah

Number.	Railways (including branches worked.)	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.									
		Years.									
		1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
1 (*a*)	Bengal Central	...	...	...	...	...	...	...	...	...	...
2 (*a*) to (*e*)	Bengal-Nagpur	80	1,36	62,32	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,84
3 (*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India	6	6,03	18,76	16,82	49,86	60,95	24,05	13,72	9,76	23,43
4 (*a*) to (*e*)	Eastern Bengal State	61	18	4	3,00	13,89	29,15	31,10	40,07	35,32	30,88
5 (*a*) to (*d*)	East Indian	11,36	11,96	18,06	80,80	1,07,94	68,09	39,09	33,15	28,67	48,89
6 (*a*) to (*g*)	Great Indian Peninsula	34,83	65,36	27,30	65,88	80,87	67,71	18,77	2,19	4,12	26,43
7 (*a*) to (*f*) & (*h*) & (*i*).	Madras	6,45	...	24,41	10,91	7,47	11,38	20,80	54,50	39,56	60,42
8 (*a*) to (*c*)	Nizam's Guaranteed State	...	...	...	15,32	40,79	78,37	37,06	...	...	...
9 (*a*) to (*k*)	North Western State	77,51	1,15,54	2,13,51	1,26,86	62,24	41,82	41,48	54,68	49,91	30,87
10 (*a*) to (*e*)	Oudh and Rohilkhand State	30,21	15,14	23,03	33,38	23,72	39,27	27,17	9,30	20,61	54,52
11 (*a*) & (*b*)	Assam-Bengal	1,06,03	1,39,34	1,11,06	1,09,69	1,35,82	1,05,81	97,65	88,10	71,84	45,68
12 (*a*) to (*c*)	Bengal and North-Western	3	21,09	32,03	1,04,74	62,86	70,90	28,89	30,86	26,15	12,63
13 (*a*) & (*b*)	Bengal Dooars	...	...	...	72	1,86	7,98	18,19	15,61	15,56	8,50
14 (*a*) to (*d*)	Bhavnagar-Gondal-Junagad-Porbandar	17	16	9,24	9,30	5,43	...	...	...	...	...
15 (*a*)	Burma	...	67,44	43,40	39,67	43,29	62,52	50,63	56,42	35,77	...
16 (*a*)	Deoghur	...	...	...	...	...	...	...	...	...	...
17 (*a*) & (*b*)	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...
18 (*a*) to (*c*)	Jodhpur-Bikaner	...	...	23	10,04	26,40	4,86	6,61	4,00	6,77	...
3 (*g*) to (*l*) & (*o*).	Rajputana-Malwa	54,05	14,22	18,44	12,09	8,58	2,67	59	21	1,07	5,63
19 (*a*) to (*c*)	Rohilkund and Kumaon	1,54	96	4	...	...	...	...	3	43	83
20 (*a*) to (*f*)	South Indian	7,49	1,00	53	5,19	—21,05	2,70	14,00	36,50	73,39	56,12
21 (*a*) to (*j*)	Southern Mahratta	...	...	...	...	...	...	...	...	...	2,56
22 (*a*)	Udaipur-Chitor	3,05	10,26	18	26	1,13	2,13	45	21	...	...
23 (*a*)	Baraset-Basirhat Light	...	...	...	...	...	...	...	...	...	...
24 (*a*)	Barsi Light	...	...	...	...	...	...	...	...	...	...
25 (*a*)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	5,30
26 (*a*)	Cutch	...	...	...	...	...	...	...	...	...	92
27 (*a*)	Dwara-Therria Light	...	...	...	...	...	...	...	...	...	8,24
28 (*a*)	Kalka-Simla	...	...	...	...	...	3,39	4,51	23,53	49,99	50,99
30 (*a*)	Morvi	...	...	...	...	...	...	2,32	11	3	85
31 (*a*)	Ranaghat-Krishnagar Light	...	...	...	1,01	5,01	5	...	...	...	...
33 (*a*)	Tarakeshwar-Magra Light	...	...	...	...	...	...	...	...	...	16
34 (*a*)	Tezpur-Balipara Light	2,32	62	...	...	...	...	...	...	...	...
36 (*a*)	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...
37 (*a*)	Howrah-Amta Light	...	...	3,62	4,01	29	6	1	8	...	20
38 (*a*)	Howrah-Sheakhala Light	...	...	1,31	2,81	33	...	...	...	...	...
39 (*a*)	Jorhat	...	...	...	...	...	...	...	...	...	...
	Total	3,36,51	4,70,66	6,07,51	8,30,33	8,27,93	8,26,84	5,42,51	5,03,52	6,11,46	5,91,89

DIX 7.
Report for 1902.)
during each of the past 10 years.

Appendix 7.
Annual Capital outlay.

11 of Report.)

EXPENDITURE ON ROLLING STOCK IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.										
YEARS.										Number.
1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	
...	...	...	11,59	4,37	1,95	27	3	4	15	1 (*a*).
26	2,15	2,26	32	1,18	38,92	27,35	4,29	57,16	34,13	2 (*a*) to (*e*).
5,25	6,94	2,08	24	6,00	13,84	13,34	4,24	2,51	7,97	3 (*a*) to (*f*) & (*m*) & (*n*).
55	8,26	7,30	16,68	10,52	18,21	4,57	13,01	18,12	35,25	4 (*a*) to (*e*).
3,60	26,91	12,02	27,27	36,32	1,06,52	64,34	73,57	54,29	17,91	5 (*a*) to (*d*).
9,35	2,68	2,40	7,85	1,63	8,27	13,36	21,27	12,27	31,84	6 (*a*) to (*g*).
45	33	1,65	6,57	1,47	3,66	3,26	10,11	25,43	16,44	7 (*a*) to (*f*) & (*h*) & (*i*).
1	27	2,22	49	3,06	12,80	12,67	1,51	5,86	3,05	8 (*a*) to (*c*).
87	2,08	10,63	36,32	21,85	5,70	79	12,30	22,21	14,34	9 (*a*) to (*h*).
57	8,06	59	3,51	7,06	5,68	79	5,85	17,93	23,91	10 (*a*) to (*c*).
4,63	17,52	16,29	4,25	2,65	1,63	87	3,05	7,69	9,86	11 (*a*) & (*b*).
14	9,03	2,25	9,98	24,03	15,84	18,58	16,47	12,49	18,33	12 (*a*) to (*e*).
...	1	1	52	1	4,09	2,32	1,40	7	25	13 (*a*) & (*b*).
8	2	1,80	87	1,24	8	16	30	35	55	14 (*a*) to (*d*).
10,84	9,93	8,80	1,50	6,36	11,96	4,74	20,35	26,60	19,57	15 (*a*).
...	...	...	...	...	...	...	...	...	...	16 (*a*).
60	1,66	78	14	20	16	2,52	1,13	...	9	17 (*a*) & (*b*).
—1,56	*—11*	39	...	6,08	14,14	22	2,22	1,95	4,22	18 (*a*) to (*c*).
4,86	1,12	2,15	*—12*	*—1,59*	3,07	1,88	39	8,70	8,19	8 (*g*) to (*l*) & (*o*).
2	33	18	2	2,42	1,02	3,39	2,06	6,86	6,11	19 (*a*) to (*e*).
1,59	87	29	1,22	43	73	26	*—5*	1,46	2,96	20 (*a*) to (*f*).
1,30	37	45	1,40	5,34	3,42	1,44	2,88	26	85	21 (*a*) to (*j*).
...	...	...	2,25	5	...	...	42	...	...	22 (*a*).
...	...	...	...	...	...	...	...	...	...	23 (*a*).
...	...	2,49	1,77	27	...	...	*—39*	...	...	24 (*a*).
...	...	...	...	...	...	...	...	...	2,17	25 (*a*).
...	...	...	...	...	...	...	...	...	12	26 (*a*).
...	...	...	...	...	...	...	...	...	...	27 (*a*).
...	...	...	...	...	...	...	...	1,07	3,93	28 (*a*).
24	*—10*	24	2	12	4	6	10	*—12*	*—22*	30 (*a*).
...	...	...	...	1,20	...	24	...	...	...	31 (*a*).
...	...	...	...	1	18	...	...	...	1	33 (*a*).
98	27	18	...	6	12	...	...	...	...	34 (*a*).
—42	1	24	2	*—25*	54	*—16*	1	9	41	36 (*a*).
...	...	1,08	1,26	99	11	46	...	72	...	37 (*a*).
...	...	...	1,17	48	...	...	...	...	3	38 (*a*).
4	6	*—7*	38	20	...	...	*—31*	4	12	39 (*a*).
44 75	98,07	78,70	1,37,44	1,43,71	2,67,68	1,77,67	1,98,73	2,84,05	2,62,54	TOTAL.

Appendix 7.
Annual Capital outlay.

APPEN
(Appendix 10 in
Capital expenditure in thousands of rupees

(Referred to in paragraph

Number.	Railways (including branches worked).	EXPENDITURE ON IMPROVEMENT OF EXISTING LINE IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.									
		YEARS.									
		1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
1 (*a*)	Bengal Central	69	34	69	86	2,15	75	1,66	1,18	1,15	73
2 (*a*) to (*e*)	Bengal-Nagpur	3,18	3,15	10,08	3,56	57	25	1,68	3,37	1,61	3,58
3 (*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India.	7,59	16,10	23,86	28,88	15,33	36,60	8,42	21,74	9,89	5,71
4 (*a*) to (*e*)	Eastern Bengal State	3,93	5,91	18,06	27,03	7,64	8,72	13,85	11,37	15,46	23,86
5 (*a*) to (*d*)	East Indian.	10,98	14,38	15,75	19,82	28,96	40,78	48,92	64,24	58,69	41,88
6 (*a*) to (*g*)	Great Indian Peninsula	13,31	9,99	6,09	4,37	8,04	6,75	10,28	11,65	17,04	23,56
7 (*a*) to (*f*) & (*h*) & (*i*).	Madras	2,11	3,66	4,07	3,30	3,16	2,43	3,93	9,33	4,56	5,91
8 (*a*) to (*c*)	Nizam's Guaranteed State	3,97	1,79	82	3,15	1,24	*—1,05*	2,78	6,53	8,14	3,76
9 (*a*) to (*h*)	North Western State	25,88	29,48	30,47	28,30	18,92	20,58	19,10	14,67	48,44	22,42
10 (*a*) to (*c*)	Oudh and Rohilkand State	1,33	7,09	2,61	4,01	4,33	9,74	8,30	9,45	12,75	12,40
11 (*a*) & (*b*)	Assam-Bengal	...	...	...	...	...	...	...	...	...	...
12 (*a*) to (*c*)	Bengal and North-Western	3,29	1,53	49	2,86	5,05	6,63	12,21	7,19	25,66	21,79
13 (*a*) & (*b*)	Bengal Dooars	...	49	84	1,08	53	38	16	2	5	21
14 (*a*) to (*d*)	Bhavnagar-Gondal-Junagad-Porbandar.	1,34	2,66	1,03	73	2,10	91	31	16	40	3
15 (*a*)	Burma.	1,00,89	7,66	17,27	6,24	5,09	11,31	25,14	22,05	7,91	20,35
16 (*a*)	Deoghur	...	1	...	...	1	*—1*	...	...	...	...
17 (*a*) & (*b*)	Dibru-Sadiya	27	21	*—25*	2,41	7	...	6	7,20	23	32
18 (*a*) to (*c*)	Jodhpur-Bikaner	1,58	*—4*	13	7	6,35	*—81*	*—1,58*	3,16	3,77	62
3 (*g*) to (*l*) & (*o*).	Rajputana-Malwa	3,18	5,04	5,14	2,85	3,32	3,98	3,53	8,20	13,88	9,48
19 (*a*) to (*e*)	Rohilkund and Kumaon	63	59	2,56	1,71	79	21	1,15	1,02	66	1,59
20 (*a*) to (*f*)	South Indian	2,63	92	1,01	76	1,52	3,59	3,03	3,83	1,46	3,40
21 (*a*) to (*j*)	Southern Mahratta	5,28	7,63	4,01	5,60	6,29	7,50	5,79	4,59	3,29	2,98
22 (*a*)	Udaipur-Chitor	...	...	...	...	...	...	...	19	4	1
23 (*a*)	Baraset-Basirhat Light	...	...	...	...	...	...	...	...	...	...
24 (*a*)	Barsi Light	...	...	...	...	...	...	...	...	7	...
25 (*a*)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
26 (*a*)	Cutch	...	...	...	...	...	...	...	...	...	...
27 (*a*)	Dwara-Therria Light	...	...	...	...	...	...	...	...	...	...
28 (*a*)	Kalka-Simla	...	...	...	...	...	...	...	...	...	...
30 (*a*)	Morvi	53	1,37	10	49	7	5	*—16*	1	...	...
31 (*a*)	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33 (*a*)	Tarakeshwar-Magra Light	...	...	...	...	1	1	...	2	5	6
34 (*a*)	Tezpur-Balipara Light	...	...	9	3	1	5	13	...	...	...
36 (*a*)	Darjeeling-Himalayan	40	20	42	38	49	25	10	21	12	31
37 (*a*)	Howrah-Amta Light	...	...	...	...	...	...	...	...	...	...
38 (*a*)	Howrah-Sheakhala Light	...	...	...	...	...	...	...	...	...	2
39 (*a*)	Jorhat	13	3	10	...	...	4	...	17	3	...
	TOTAL	1,93,12	1,20,15	1,45,44	1,48,49	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	2,04,98

DIX 7—*concluded.*
Report for 1902.)
during each of the past 10 years.

Appendix 7.
Annual Capital outlay.

11 of Report.)

TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES *INCLUDING SUSPENSE.*										
YEARS.										Number.
1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	
55	36	4,59	10,29	6,90	3,04	34	2,58	1,58	76	1 (*a*).
1,92	6,19	1,16,54	1,99,28	1,62,45	1,98,87	75,84	77,61	1,76,45	1,94,63	2 (*a*) to (*e*).
16,18	26,16	54,14	58,06	89,09	98,82	28,58	56,65	29,50	19,61	3 (*a*) to (*f*) & (*m*) & (*n*).
5,73	14,62	27,24	51,23	35,51	56,49	49,25	66,77	81,52	1,19,34	4 (*a*) to (*e*).
33,52	62,80	70,12	1,42,83	1,66,97	2,18,13	1,62,49	1,41,12	1,45,82	1,39,68	5 (*a*) to (*d*).
61,82	74,39	51,02	71,81	79,51	78,98	53,32	44,54	23,58	1,16,21	6 (*a*) to (*g*).
7,98	4,39	27,45	19,63	12,65	19,27	55,11	63,58	60,36	86,09	7 (*a*) to (*f*) & (*h*) & (*i*).
42	4,15	1,85	18,30	60,32	96,90	32,24	18,40	15,84	5,73	8 (*a*) to (*c*).
1,07,47	1,72,05	2,63,14	1,66,19	82,47	66,46	83,47	93,87	1,80,10	69,58	9 (*a*) to (*h*).
36,11	35,29	20,23	44,90	33,16	55,69	39,26	32,76	76,47	87,45	10 (*a*) to (*o*).
1,43,79	1,57,49	1,17,01	1,16,28	1,18,74	1,13,15	86,46	85,47	69,86	53,24	11 (*a*) & (*b*).
3,56	45,34	35,46	1,63,40	79,06	70,13	55,94	48,78	63,47	53,92	12 (*a*) to (*c*).
...	42	1,07	2,17	4,25	22,26	19,77	15,23	10,45	7,09	13 (*a*) & (*d*).
2,19	2,83	14,18	8,67	8,95	92	17	96	44	67	14 (*a*) to (*d*).
1,24,03	74,82	82,48	59,87	51,62	86,24	92,79	95,26	71,01	31,08	15 (*a*).
...	1	...	...	1	—1	...	...	—9	...	16 (*a*).
87	1,28	58	2,55	27	17	2,57	8,32	1,73	41	17 (*a*) & (*b*).
—21	—15	48	10,12	39,36	18,04	4,89	19,78	6,64	—57	18 (*a*) to (*c*).
43,87	34,23	11,46	—2,83	9,43	10,59	17,19	12,74	22,33	30,53	3(*g*) to (*l*) & (*o*).
2,23	2,50	2,61	3,79	2,10	13	5,37	4,34	12,92	4,60	19 (*a*) to (*c*).
5,25	5,25	—14	4,59	—19,88	7,39	17,47	47,49	99,17	52,83	20 (*a*) to (*f*).
7,87	7,31	6,59	8,19	11,05	8,74	8,15	4,83	1,22	24,96	21 (*a*) to (*j*).
3,05	10,26	18	2,51	1,18	2,16	45	82	4	1	22 (*a*).
...	...	...	...	...	...	...	...	...	...	23 (*a*).
...	...	2,49	1,77	27	...	...	—39	19	...	24 (*a*).
...	...	...	...	...	...	...	...	...	7,48	25 (*a*).
...	...	...	...	...	...	...	...	...	1,04	26 (*a*).
...	...	...	...	...	...	...	...	...	8,24	27 (*a*).
...	...	...	...	...	5,81	6,10	22,96	57,95	48,51	28 (*a*).
66	1,76	—17	94	3	27	2,22	31	—26	56	30 (*a*).
...	...	...	1,01	6,21	5	24	...	...	...	31 (*a*).
...	...	...	...	2	24	—1	10	20	38	33 (*a*).
3,30	89	27	3	7	17	13	...	...	...	34 (*a*).
—3	21	65	41	24	79	—6	22	20	72	36 (*a*).
...	...	4,70	5,27	1,28	16	47	8	72	20	37 (*a*).
...	...	1,31	3,98	81	...	...	...	...	5	38 (*a*).
18	10	37	37	7	22	—23	—8	—5	8	39 (*a*).
6,12,31	7,44,95	9,17,85	11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	11,65,11	TOTAL.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay **in thousands of rupees** *on each railway to the*

(Referred to in paragraphs

Number. Main head.	Number. Sub-head.	Railway.	Length of line. Open. Single track.	Open. Double track.	Open. Total.	Under construction. Single track.	Under construction. Double track.	Under construction. Total.	I.—Preliminary expenses. Open.	I.—Preliminary expenses. Under construction.
		PART I.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.		
		I.—State lines worked by Companies.								
1	(a)	Bengal Central . . . . . 5′ 6″ gauge	125·01	...	125·01	...	...	...	1,48	...
2	(a)	Bengal-Nagpur . . . . . „	1,666·11	16·35	1,682·46	43·32	...	43·32	20,68	26
8	(b)	Bezwada Extension . . . . . „	20·58	...	20·58	...	...	...	15	...
6	(b)	Bhopal-Itarsi (British section) . . „	13·11	...	13·11	...	...	...	61	...
5	(a)	East Indian . . . . . „	1,441·77	†493·34	1,935·11	215·14	...	215·14	17,31	2,75
3	(b)	Godhra-Rutlam-Nagda . . . . . „	141·14	...	141·14	...	...	...	1,80	...
6	(a)	Great Indian Peninsula . . . . „	1,099·71	461·92	1,561·63	...	...	...	10,59	...
6	(e)	Indian Midland . . . . . „	805·03	...	805·03	...	...	...	9,95	...
7	(c)	Madras (North-East line) . . . . „	496·73	0·46	497·19	0·93	...	0·93	3,44	...
11	(a)	Assam-Bengal . . . . . 3′ 3¾″ gauge	643·68	...	643·68	96·70	...	96·70	17,73	6,77
15	(a)	Burma . . . . . „	1,324·82	12·15	1,336·97	††	...	...	28,55	...
21	(c)	Guntakal-Mysore frontier . . . „	119·50	...	119·50	...	...	...	59	...
18	(c)	Jodhpur-Hyderabad (British section) . „	123·98	...	123·98	...	...	...	59	...
19	(b)	Lucknow-Bareilly . . . . . „	237·04	...	237·04	...	...	...	1,63	...
21	(g)	Mysore section (Southern Mahratta) . „	296·22	...	296·22	...	...	...	2,95	...
7	(d)	Nilgiri . . . . . „	16·99	...	16·99	¶	...	...	...	...
3	(j)	Palanpur-Deesa (British section) . „	17·28	...	17·28	...	...	...	2	...
3	(k)	Rajputana-Malwa . . . . . „	1,646·38	2·92	1,649·30	133·32	...	133·32	22,71	...
19	(a)	Rohilkund and Kumaon . . . . „	53·92	...	53·92	§§56·00	...	56 00	91	8
20	(a)	South Indian . . . . . „	1,123·13	...	1,123·13	‖	...	...	11,31	...
21	(a)	Southern Mahratta . . . . . „	1,042·04	...	1,042·04	...	...	...	10,91	...
20	(e)	Tinnevelly-Quilon (Travancore) (Br. secn.) „	49·93	...	49·93	...	...	...	50	...
12	(c)	Tirhoot . . . . . „	516·89	...	516·89	238·35	...	238·35	2,18	14
2	(b)	Jubbulpur-Gondia extension . . 2′ 6″ gauge	133·19	...	133·19	§155·50	...	155·50	39	66
2	(d)	Raipur-Dhamtari . . . . . „								
		TOTAL .	13,154·18	987·14	14,141·32	939·26	...	939·26	1,66,98	10,66
		II.—State lines worked by the State.								
4	(a)	Eastern Bengal State . . . . . 5′ 6″ gauge	166·47	112·21	278·68	8·25	...	8·25	1,37	17
4	(c)	Eastern Bengal State* . . 3′ 3¾″ and 2′ 6″ gauges	533·27	...	533·27	195·87	...	195·87	3,01	1,07
		Dacca section . . . . . 3′ 3¾″ gauge	85·92	...	85·92	...	...	...	1,28	...
9	(a)	North Western State, Commercial section 5′ 6″ gauge	1,975·03	108·00	2,083·03	165·00	...	165·00	29,91	1,05
		Ditto Military section „	986·55	60·36	1,046·91	...	...	...	12,63	...
10	(a)	Oudh and Rohilkhand State . . „	1,101·19	...	1,101·19	**67·12	...	67·12	13,49	...
10	(c)	Cawnpore-Burhwal (metre gauge link) 3′ 3¾″ gauge	79·60	...	79·60	...	...	...	32	...
9	(f)	Khushalgarh-Kohat-Thal . . . 2′ 6″ gauge	91·73	...	91·73	...	...	...	55	...
9	(g)	Nowshera-Dargai . . . . . „	40·25	...	40·25	...	...	...	31	...
39	(a)	Jorhat . . . . . 2′ 0″ gauge	30·25	...	30·25	...	...	...	...	...
		TOTAL .	5,090·26	280·57	5,370·83	436·24	...	436·24	62,87	2,29
		III.—Companies' lines guaranteed by Government under old contracts.								
8	(a)	Bombay, Baroda and Central India . 5′ 6″ gauge	252·45	251·90	504·35	...	...	...	...	...
7	(a)	Madras . . . . . „	856·48	43·43	899·91	3·90	...	3·90	1,10	68
		TOTAL .	1,108·93	295·33	1,404·26	3·90	...	3·90	1,10	68
		IV.—Companies' lines guaranteed by Government under modern contracts.								
10	(b)	Hardwar-Dehra . . . . . 5′ 6″ gauge	32·04	...	32·04	...	...	...	98	...
4	(b)	Brahmaputra-Sultanpur . . . 3′ 3¾″ gauge	59·37	...	59·37	...	...	...	1,98	...
		TOTAL .	91·41	...	91·41	...	...	...	2,96	...
		V.—District Boards' lines.								
20	(d)	Tanjore District Board . . . 3′ 3¾″ gauge	99·46	...	99·46	‖‖3·90	...	3·90	34	...

NOTE.—Part I includes all railways, the transactions

* Northern, Behar and Kaunia-Dhubri sections (including the Teesta-Kurigram branch and British section, Cooch Behar-Santrabari extension,

§ Excludes the Neinpur-Mandla section of the Jubbulpur-Gondia extension railway, 22·67 miles, on which work has not been commenced.

¶ Excludes the Coonoor-Ootacamund extension, 11·50 miles, on which work has not been commenced. ‖ Excludes the Tiruppachetti-Sivagunga branch, 9·00 miles, on which work has not been commenced. ‖‖ Excludes the Adirampatnam and Thambikkottai salt sidings, 1·00 and 0·63 miles, respectively on which work has not been commenced.

DIX 8.

in Report for 1902.)

Appendix 8.

Capital outlay.

close of the year 1903, distributed over main heads of expenditure.

6 to 8 of Report.)

II.—Land.		III.—Formation.		IV.—Bridge-work.		V.—Fencing.		VI.—Electric telegraph.		VII.—Ballast and Permanent-way.		VIII.—Stations and buildings.		IX.—Colliery works.	
Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.
1,39	...	7,78	...	14,72	...	4,21	...	...	...	45,84	...	12,27	...	...	...
98,20	1,80	2,74,93	4,85	5,06,67	6,78	11,09	7	5	...	6,63,83	11,75	1,62,90	41	...	...
47	...	1,70	...	1,66	...	18	...	...	...	5,37	...	79	...	...	...
18	...	16,10	...	18,88	...	2,19	...	...	...	27,99	...	10,37	...	...	...
42,81	2,05	2,52,32	12,44	7,76,69	6,23	40,79	12	29,83	...	12,04,19	22,99	4,96,56	35	25,40	...
36	...	60,95	...	41,33	...	2,87	...	4	...	46,97	...	15,08	...	...	...
2,43	...	11,63,92‡	...	...	...	...	...	18,29	...	7,63,42	...	3,98,21	...	...	...
12,38	...	1,02,45	...	2,38,33	...	26,76	...	18	...	3,44,85	...	96,30	...	...	...
14,93	...	53,99	...	1,79,39	...	4,89	...	17	...	1,88,12	...	44,15	...	...	...
35,12	1,56	1,95,43	2,51,03	1,18,13	41,42	12,83	21	...	...	1,32,02	24,82	66,51	2,50	...	...
21,07	...	2,08,76	...	1,97,92	...	29,56	...	17	...	3,15,40	...	1,13,79	...	...	...
28	...	7,84	...	20,35	...	60	...	1	...	18,23	...	4,75	...	...	...
37	...	4,47	...	4,64	...	40	...	...	...	21,93	...	3,75	...	...	...
2,60	...	5,78	...	7,91	...	2,03	...	...	...	38,09	...	10,99	...	...	...
1,58	...	24,84	...	21,73	...	1,44	...	...	...	51,02	...	17,04	...	...	...
...	...	15	...	...	...	...	...	...	...	—1	...	1	...	...	...
...	...	64	...	59	...	10	...	...	...	2,10	...	55	...	...	...
14,36	...	75,71	...	2,16,79	...	32,58	...	33	...	3,77,91	...	2,04,34	...	...	...
2	...	1,28	...	1,53	...	58	...	...	...	8,99	33	1,79	...	...	...
10,83	...	56,57	...	1,49,26	...	17,89	...	1,07	...	2,12,68	...	90,44	...	...	...
11,71	...	1,91,88	...	1,87,19	...	15,57	...	...	...	2,28,39	...	1,23,27	...	...	...
3,95	...	3,26	...	5,04	...	77	...	1	...	14,34	...	2,70	...	...	...
26,26	...	37,31	...	1,01,56	...	12,48	...	22	...	1,20,32	...	46,12	...	...	...
28	52	3,97	11,24	5,39	11,31	12	10	...	...	24,42	12,63	1,88	1,06	...	...
2,96,58	5,93	27,51,13	2,59,56	28,15,68	65,74	2,19,84	50	50,37	...	48,66,41	72,52	19,24,56	4,32	25,40	...
27,59	18,50	14,73	5,17	30,59	1,28	7,13	2,10	1	...	1,22,91	8,49	74,19	2,53	...	...
14,43	5	41,28	61	1,27,55	55	13,09	1	25	...	1,22,19	1,01	53,85	2	...	...
5,33	...	7,00	...	5,90	...	1,14	...	...	...	19,26	...	14,42	...	...	...
26,03	...	2,80,36	28	7,06,81	13	74,50	...	8,05	...	9,69,61	2,96	3,93,83	1	...	...
10,64	...	3,96,90	...	3,60,34	...	7,16	...	26	...	4,54,52	...	1,10,74	...	...	...
14,61	...	51,21	29	3,46,84	45	33,79	4	46	...	4,12,76	3,35	1,51,31	25	...	...
95	...	1,37	...	2,66	...	2,56	...	...	...	12,16	...	4,01	...	...	...
2,37	...	11,48	...	12,59	...	36	...	...	...	12,97	...	4,85	...	...	...
26	...	80	...	4,77	...	12	...	...	...	6,98	...	1,70	...	...	...
6	...	82	...	65	...	3	...	...	...	3,37	...	89	...	...	...
1,02,27	18,55	8,05,95	6,35	15,93,70	2,41	1,39,88	2,15	9,63	...	21,36,72	15,81	8,14,79	2,81	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	4,01,66‡	15,05	...	12,76	...	2,93	11,63	7	4,00,51	24,49	1,12,20	6,18	...	...
...	...	4,01,66‡	15,05	...	12,76	...	2,93	11,63	7	4,00,51	24,49	1,12,20	6,18	...	...
...	...	6,24	...	5,69	...	52	...	...	...	8,93	...	2,25	...	...	...
...	...	4,39	...	3,95	...	17	...	...	...	14,20	...	2,90	...	...	...
...	...	10,63	...	9,64	...	69	...	...	...	23,13	...	5,15	...	...	...
2,80	7	3,50	1	13,19	1	71	...	3	...	15,48	...	3,72	...	...	...

of which pass through the Government accounts.
2' 6" gauge). † Of this, 2·20 miles have treble track. ‡ Includes expenditure on open line under the two subsequent columns.
** Excludes the Phaphamau-Zafarabad branch, 57·50 miles, on which work has not been commenced.
†† Excludes the Pegu-Martaban extensions, 121·27 miles, on which commencement of work has not yet been authorized.
§§ Excludes the Moradabad-Ramnagar and Lalkua-Kashipur extensions, 47·00 and 45·00 miles, respectively, on which work has not yet been commenced.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay* in thousands of rupees *to the close of the
(Referred to in paragraphs

Number.		Railway.	X.—Plant.		XI.—Rolling-stock.		XII.—General charges.		XIII.—Exchange.	
Main head.	Sub-head.		Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.
		PART I—*continued.*								
		I.—State lines worked by Companies.								
1	(a)	Bengal Central . . . . . 5′ 6″ gauge	4,07	...	28,31	...	3,46	...	...	...
2	(a)	Bengal-Nagpur . . . . . ,,	47,12	1,06	3,34,46	...	1,23,43	1,74	6,53	...
3	(b)	Bezwada Extension . . . . . ,,	8	...	20	...	1,17	...	...	...
6	(b)	Bhopal-Itarsi (British section) . . ,,	43	...	56	...	2,62	...	...	...
5	(a)	East Indian . . . . . ,,	69,11	9,93	11,35,30	...	5,45,51	5,08	...	...
3	(b)	Godhra-Rutlam-Nagda . . . ,,	73	...	...	...	7,39	...	...	...
6	(a)	Great Indian Peninsula . . . ,,	58,83	...	4,00,66	...	2,10,34	...	8,14	...
6	(f)	Indian Midland . . . . . ,,	14,66	...	2,07,18	...	39,61	...	2,52	...
7	(c)	Madras (North East line) . . . ,,	12,45	...	92,31	...	28,57	...	...	...
11	(a)	Assam-Bengal . . . . . 3′ 3⅜″ gauge	14,19	2,13	60,34	9,06	1,15,08	12,29	...	...
15	(a)	Burma . . . . . ,,	21,17	...	1,99,18	...	1,08,72	...	12,51	...
21	(c)	Guntakal-Mysore frontier . . . ,,	30	...	...	...	6,14	...	...	...
18	(c)	Jodhpur-Hyderabad (British section) . ,,	32	...	7	...	3,05	...	...	...
12	(b)	Lucknow-Bareilly . . . . . ,,	2,77	...	32,42	...	4,85	...	42	...
21	(g)	Mysore-section (Southern Mahratta) . ,,	3,67	...	25,15	...	9,92	...	...	...
7	(d)	Nilgiri . . . . . ,,	...	...	...	...	2	...	...	...
8	(j)	Palanpur-Deesa (British section) . ,,	7	...	...	...	15	...	...	...
3	(k)	Rajputana-Malwa . . . . . ,,	33,66	...	2,35,14	...	33,41	...	49,09	...
19	(a)	Rohilkund and Kumaon . . . ,,	46	12	6,83	...	1,83	43	...	...
20	(a)	South Indian . . . . . ,,	18,01	...	1,34,49	...	36,25	...	2,42	...
21	(a)	Southern Mahratta . . . . . ,,	30,66	...	1,16,26	...	65,10	...	4,91	...
20	(e)	Tinnevelly-Quilon (Travancore) (Br. sec.) ,,	31	...	2,30	...	4,08	...	...	..
12	(c)	Tirhoot . . . . . ,,	10,07	1	95,37	...	28,72	10	7,05	...
2	(b)	Jubbulpur-Gondia extension . . 2′ 6″ gauge	39	67	14,95	...	3,72	6,13	...	...
2	(d)	Raipur-Dhamatri . . . . . ,,								
		TOTAL	3,43,53	13,92	31,21,45	9,06	15,29,54	30,77	93,59	...
		II.—State lines worked by the State.								
4	(a)	Eastern Bengal State . . . . 5′ 6″ gauge	8,49	10	1,57,80	...	51,52	1,13	—2	...
4	(c)	Eastern Bengal State* . 3′ 3⅜″ and 2′ 6″ gauges	16,63	55	1,02,11	5	35,12	84	9,31	...
		Dacca section . . . . . 3′ 3⅜″ gauge	2,59	...	15,70	...	3,63	...	3,06	...
9	(a)	North Western State, Commercial sec. 5′ 6″ gauge	79,78	1	5,79,47	...	2,46,78	26	46,39	...
		Ditto Military sec. . ,,	22,42	...	1,14,36	...	74,78	...	40,80	...
10	(a)	Oudh and Rohilkhand State . . ,,	30,78	8	2,18,19	...	1,02,61	16	...	...
19	(c)	Cawnpore-Barhwal (metre gauge link) 3′ 3⅜″ gauge	5	...	...	...	1,03	...	...	...
9	(f)	Khushalgarh-Kohat-Thal . . . 2′ 6″ gauge	70	...	4,97	...	4,19	...	...	...
9	(g)	Nowshera-Durgai . . . . . ,,	1,19	...	6,70	...	1,03	...	...	...
37	(a)	Jorhat . . . . . 2′ 0″ gauge	60	...	2,01	...	41	...	...	...
		TOTAL	1,63,23	74	11,94,21	5	5,31,15	2,39	99,54	...
		III.—Companies' lines guaranteed by Government under old contracts.								
8	(a)	Bombay, Baroda and Central India . 5′ 6″ gauge	...	...	2,15,95	...	...	...	...	...
7	(a)	Madras . . . . . ,,	13,48	3,10	1,69,64	9,15	1,25,63	5,97	...	...
		TOTAL	13,48	3,10	3,85,59	9,15	1,25,63	5,97	...	...
		IV.—Companies' lines guaranteed by Government under modern contracts.								
10	(b)	Hardwar-Dehra . . . . . 5′ 6″ gauge	24	...	...	...	2,58	...	...	...
4	(b)	Brahmaputra-Sultanpur . . . 3′ 3⅜″ gauge	24	...	...	...	1,54	...	...	...
		TOTAL	48	...	...	...	4,12	...	...	...
		V.—District Boards' lines.								
20	(d)	Tanjore District Board . . . 3′ 3⅜″ gauge	34	...	...	...	4,35	...	...	...

NOTE.—Part 1 includes all railways, the

* Northern, Behar, and Kaunia-Dhubri sections including the Teesta-Kurigram branch and

‡ Amount incurred on purchase of line.

§ Excludes outlay on the Native State section (Rs. 50,00,000).

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in Report for 1902.)
year 1903, distributed over main heads of expenditure.
6 to 8 of Report.)

XIV.—Sundries.		XV.—Total.		XVI.—Average cost per mile open.	XVII.—Ferries, etc.		XVIII.—Suspense.		XIX.—Total including ferries and suspense.		XX.—Capital unclassified outlay.	XXI.—Capital expenditure on collieries.	XXII.—Total suspense balance.	XXIII.—Grand Total.
Open.	Under construction.	Open.	Under construction.		Open.	Under construction.	Open.	Under construction.	Open.	Under construction.				
...	...	1,28,53	...	1,06	...	...	3,36	...	1,31,89	...	...	...	...	...
...	...	22,54,77	28,72	1,84	21,99	...	91,91	31	23,68,67	29,03	...	...	...	...
...	...	11,77	...	57	...	...	...	...	11,77	...	...	...	...	...
...	...	30,93	...	1,41	...	...	...	...	30,93§	...	...	...	...	...
18,57	...	46,74,39	61,94	2,42	13,20	...	1,30,09	...	48,17,68	61,94	...	...	...	...
...	...	1,78,02	...	1,26	...	...	...	...	1,78,02	...	...	...	...	...
...	...	30,34,43	...	1,94	...	...	74,10	...	31,08,53	...	...	...	...	...
3,79	...	10,98,96	...	1,36	...	...	...	...	10,98,96	...	...	...	...	...
...	...	6,32,41	...	1,27	59	...	24	...	6,33,84	...	...	...	...	...
¶ 75,70	...	8,63,08	3,36,79	1,34	19,31	...	17,87	3,23	9,00,26	3,40,02	...	...	...	...
...	...	12,56,79	...	94	8,47	...	36,05	...	13,01,31	...	...	...	...	...
...	...	59,07	...	49	...	...	...	...	59,07	...	...	...	...	...
...	...	39,59	...	53	27	...	59	...	40,45	...	...	...	...	...
41	...	1,09,90	...	46	72	...	4,40	...	1,15,02	...	...	...	...	...
...	...	1,58,74	...	54	...	...	3,61	...	1,62,35	...	...	...	...	...
35,07‡	...	35,24	...	2,07	...	...	...	...	35,24	...	...	...	...	...
...	...	4,22	...	24	...	...	...	...	§§2,37	...	...	...	...	...
...	...	13,46,03	** 5,78	82	...	...	49,02	...	13,95,05	** 5,78	...	...	...	...
...	—6	24,22	90	45	...	...	2	76	24,24	1,66	...	...	...	...
11,18	...	8,02,40	...	71	...	...	29,05	...	8,31,45	...	...	...	...	...
—1	...	9,75,85	...	94	...	...	12,66	...	9,88,51	...	...	...	...	...
...	...	37,26	...	75	...	...	1,01	...	38,27	...	...	...	...	...
...	...	4,87,66	25	94	8,57	...	11,17	99	5,07,40	1,24	...	...	...	...
...	...	55,51	44,32	15	...	...	...	5	55,51	44,37	...	...	...	...
1,44,71	—6	1,33,49,77	4,78,70	1,30	73,12	...	4,65,75	5,34	1,38,36,79	4,84,04	...	...	...	...
2,38,69	...	7,34,50	39,47	1,88	14,61	...	56,39	...	8,05,50	39,47	...	...	...	...
...	...	5,43,82	4,76	1,02	18,50	43	...	...	5,62,32	5,19	...	...	...	...
...	...	79,31	...	92	...	...	...	...	79,31	...	...	...	...	...
23,21	...	34,58,78	4,70	1,66	40,96	...	1,37,49	31	36,37,18	5,01	...	...	...	...
...	...	16,06,14	...	1,53	2,64	...	...	...	16,08,78	...	...	...	...	...
...	...	13,76,05	4,62	1,25	...	...	46,84	...	14,22,89	4,62	...	...	...	...
...	...	25,11	...	32	...	...	...	...	25,11	...	...	...	...	...
...	...	54,43	...	59	1,03	...	1,25	...	56,71	...	...	...	...	...
...	...	23,91	...	59	28	...	-1	...	24,20	...	...	...	...	...
...	...	8,84	...	29	...	...	19	...	9,03	...	...	...	...	...
2,61,90	...	79,10,84	53,55	1,47	78,02	43	2,42,17	31	82,31,03	54,29	...	...	...	...
...	...	**11,96,96	...	2,37	...	...	40,37	...	12,37,33	...	...	...	...	...
...	...	12,35,85	80,38	1,46	...	88	46,58	40	12,82,43	81,66	...	...	...	...
...	...	24,32,81	80,38	1,73	...	88	86,95	40	25,19,76	81,66	...	...	...	...
1,01	...	28,44	...	89	...	...	...	...	28,44	...	...	...	...	...
...	...	29,37	...	49	...	...	5	...	29,42	...	...	...	...	...
1,01	...	57,81	...	63	...	...	5	...	57,86	...	...	...	...	...
...	...	44,46	9	45	...	...	...	1,15	44,46	1,24	...	...	...	...

transactions of which pass through the Government accounts.
British section, Cooch Behar-Santrabari extension, 2′ 6″ gauge).
§§ Excludes outlay on the Native State section (Rs. 1,85,000).
¶ Represents interest charges accruing to 30th June 1898 debited to capital.
** Details not furnished.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay **in thousands of rupees** *on each railway to the close*

(Referred to in paragraphs

Number. Main head.	Number. Sub-head.	Railway.	Length of line. Open. Single track.	Open. Double track.	Open. Total.	Under construction. Single track.	Under construction. Double track.	Under construction. Total.	I.—Preliminary expenses. Open.	Under construction.
		PART I—*continued.*	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.		
		VI.—Branch line companies' rys. assisted by Government under "Rebate" terms.								
5	(c)	South Behar . . . . . 5′ 6″ gauge	78·76	...	78·76	...	...	...	7,47	...
3	(f)	Tapti Valley . . . . . „	155·48	...	155·48	...	...	...	4,18	...
3	(g)	Ahmedabad-Dholka . . . . 3′ 3⅜″ gauge	33·50	...	33·50	...	...	...	46	...
3	(k)	Ahmedabad-Parantij . . . . „	54·70	...	54·70	...	...	...	65	...
4	(d)	Mymensingh-Jamalpur-Jagannathganj „	52·70	...	52·70	...	...	...	4	...
		Total .	375·14	...	375·14	...	...	...	12,80	...
		VII.—Lines wholly under construction—By State Agency.								
6	(g)	Agra-Delhi Chord . . . . . 5′ 6″ gauge	...	...	...	119·50	0·60	120·10	...	86
		Moorshedabad Branch . . . . „	...	...	...	97·50	...	97·50	...	83
		Quetta-Nushki . . . . . „	...	...	...	82 50	...	82·50	...	1,14
		Total .	...	...	...	†† 299 50	0·60	300·10	...	2,83
		VIII.—By Companies' Agency.								
7	(f)	Azhikal-Mangalore . . . . 5′ 6″ gauge	...	...	...	77·27	...	77·27	...	86
21	(i)	Bellary-Rayadrug . . . . 3′ 3⅜″ gauge	...	...	...	33 00	...	33·00	...	...
21	(j)	Hospet-Kottur . . . . . „	...	...	...	44·10	...	44·10	...	...
20	(f)	Tinnevelly-Quilon (Travancore) (Native State section) . . . . . „	...	...	...	58 53	...	58·53	...	1,18
7	(h)	Morappur-Dharmapuri . . . . 2′ 6″ gauge	...	...	...	18·36	...	18·36	...	4
7	(i)	Tirupattur-Krishnagiri . . . „	...	...	...	25·43	...	25·43	...	11
		Total .	...	...	...	**256·69	...	256·69	...	2,19
		TOTAL PART I .	19,919·38	1,563·04	21,482·42	1,939·49	0·60	1,940·09	2,47,05	18,65
		PART II.								
		I.—Branch line companies' railways assisted by Government under "Rebate" terms.								
9	(e)	Southern Punjab . . . . . 5′ 6″ gauge	425·33	...	425·33	156·40	...	156·40	12,94	...
11	(b)	Noakhali (Bengal) . . . . 3′ 3⅜″ gauge	34·90	...	34·90	...	...	...	...	...
		Total .	460·23	...	460·23	156·40	...	156·40	12,94	...
		II.—Assisted Companies' lines.								
		(a) Subsidized by the Government of India.								
5	(b)	Delhi-Umballa-Kalka . . . . 5′ 6″ gauge	162·36	...	162·36	...	...	...	8,07	...
		Total .	162 36	...	162·36	...	...	...	8,07	...
		(b) Subsidized by Local Governments.								
17	(a)	Dibru-Sadiya . . . . . 3′ 3⅜″ gauge	77·50	...	77·50	...	...	...	1,74	...
36	(a)	Darjeeling-Himalayan . . . . 2′ 0″ gauge	51·00	...	51·00	...	...	...	72	...
		Total .	128 50	...	128·50	...	...	...	2,46	...
		(c) Subsidized by District Boards.								
13	(a)	Bengal Dooars . . . . . 3′ 3⅜″ gauge	36·40	...	36·40	...	...	...	1,67	...
25	(a)	Bukhtiarpore-Behar Light . . . 2′ 6″ gauge	18·50	...	18·50	...	...	...	...	..
31	(a)	Ranaghat-Krishnagar Light . . „	20·25	...	20·25	...	...	...	...	...
34	(a)	Tezpur-Balipara Light . . . „	20·10	...	20·10	...	...	...	2	...
37	(a)	Howrah-Amta Light . . . . 2′ 0″ gauge	28·69	...	28·69	¶¶ 8·50	...	8·50	...	...
38	(a)	Howrah-Sheakhala Light . . . „	19·75	...	19·75	...	...	...	...	...
		Total .	143·69	...	143·69	8·50	...	8·50	1,69	...
		(d) Receiving land only from Government.								
5	(d)	Tarkessur . . . . . 5′ 6″ gauge	22·23	...	22 23	....	...	...	18	...
12	(a)	Bengal and North-Western . . . 3′ 3⅜″ gauge	812·96	...	812 96	‡‡123·94	...	123 94	7,17	1,87
13	(b)	Bengal Dooars extensions . . . „	116·56	...	116·56	...	...	...	4,00	...
16	(d)	Deoghur . . . . . „	4·79	...	4·79	...	...	...	...	...
12	(b)	Sagauli-Raxaul . . . . . „	18·09	...	18·09	...	...	...	59	...
24	(a)	Barsi Light . . . . . 2′ 6″ gauge	21·59	...	21·59	§§	...	...	1,51	...
28	(a)	Kalka-Simla . . . . . „	59·44	...	59·44	..	...	...	3,42§	...
19	(c)	Powayan Light . . . . . „	39·50	...	39·50	...	...	...	...	...
		Total .	1,095·16	...	1,095·16	123·94	...	123·94	16,87	1,87
		III.—Unassisted Companies' lines.								
17	(b)	Ledo and Tikak-Margherita Colliery . 3′ 3⅜″ gauge	11·00	...	11·00	...	...	...	...	...
33	(a)	Tarakeshwar-Magra Light . . . 2′ 6″ gauge	31·12	...	31·12	2·15	...	2·15	...	...
		Total .	42·12	...	42·12	2·15	...	2·15	...	...

Note.—Part II includes all railways

* Includes expenditure under the three preceding columns.

† Includes cost of bridge work. § Includes charges in connection with promotion

** Excludes the Salem-Attur railway, 36·06 miles, on which commencement of work has not yet been authorized.

†† Excludes the Jullundur-Kapurthala-Sultanpur railway, 28·32 miles, on which commencement of work has not yet been authorized. ‡‡ Excludes the Gorakhpur-Bagaha branch, 60·94 miles, on which work has not been commenced.

¶¶ Excludes the Antpur-Champadanga and Antpur-Rajbulhat extensions, 9·00 and 3·50 miles, respectively, on which commencement of work has yet not been authorized.

DIX 8.

in Report for 1902.)

Appendix 8.

Capital outlay.

of the year 1903, distributed over main heads of expenditure.

6 to 8 of Report.)

II.—Land.		III.—Formation.		IV.—Bridge-work.		V.—Fencing.		VI.—Electric Telegraph.		VII.—Ballast and Permanent-way.		VIII.—Stations and Buildings.		IX.—Colliery Works.	
Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.	Open.	Under construc-tion.
...	...	7,85	...	37,50	...	82	...	...	...	36,57	...	7,39	...	...	...
...	...	26,36	...	25,43	...	66	...	3	...	45,84	...	9,03	...	...	...
...	...	96	...	1,59	...	24	...	1	...	4,89	...	79	...	...	...
17	...	1,31	...	2,76	...	21	...	1	...	10,05	...	2,27	...	...	...
...	...	1,56	...	1,73	...	42	...	...	...	13,76	...	2,73	...	...	...
17	...	38,04	...	69,01	...	2,35	...	5	...	1,11,11	...	22,21	...	...	...
...	1,58	...	2,69	...	3,22	...	12	...	...	...	7,44	...	74	...	...
...	34	...	2,53	...	2,20	...	10	...	...	...	2,86	...	8	...	...
...	...	...	9,24	...	88	...	...	...	...	...	2,29	...	6	...	...
...	1,92	...	14,46	...	6,30	...	22	...	...	...	12,59	...	88	...	...
...	8,86	...	1,39	...	1,33	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1,58	...	44,08	...	16,84	...	86	...	...	...	18,23	...	4,30	...	...
...	11	...	3	...	...	...	...	...	...	...	...	...	...	...	...
...	21	...	19	...	16	...	...	...	...	...	...	...	...	...	...
...	10,76	...	45,69	...	18,33	...	86	...	...	...	10,23	...	4,30	...	...
4,01,82	37,23	40,10,91	3,41,12	45,06,22	1,05,55	3,63,47	6,66	71,71	7	75,53,36	1,35,64	28,82,63	18,49	25,40	...
...	...	1,37	...	8,33	...	1,96	...	...	...	1,40,89	...	26,54	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	11,37	...	8,33	...	1,96	...	...	...	1,40,89	...	26,54	...	...	...
...	...	39,45¶	...	...	...	...	...	...	...	70,89	...	14,37	...	...	...
...	...	39,45	...	...	...	...	...	...	...	70,89	...	14,37	...	...	...
39	...	...	...	...	...	...	...	12,07*	...	18,72	...	2,62	...	...	...
34	...	9,02¶	...	...	...	...	...	...	...	7,17	...	5,73	...	...	...
73	...	9,02	...	...	...	...	...	12,07	...	25,89	...	8,35	...	...	...
...	...	3,60	...	3,70	...	2	...	...	...	7,36	...	2,01	...	...	...
5	...	14	...	21	...	2	...	...	...	3,95	...	88	...	...	...
...	...	...	...	...	...	...	...	...	...	||5,21	...	47	...	...	...
11	...	51†	...	...	...	...	...	...	...	1,66	...	25	...	...	...
59	20	...	...	...	...	...	...	...	...	||5,95	...	76	...	...	...
13	...	...	...	...	...	...	...	...	...	||3,59	...	33	...	...	...
88	20	4,25	...	3,91	...	4	...	...	...	27,72	...	4,65	...	...	...
...	...	...	...	24	...	14	...	...	...	9	...	70	...	...	...
...	...	38,33	93	1,25,08	69	10,34	4	30	1	1,59,13	8,16	58,35	64	...	...
...	...	8,05	...	18,07	...	19	...	...	...	19,22	...	4,47	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	89	...	2,70	...	8	...	...	...	3,54	...	75	...	...	...
22	...	14	...	71	...	13	...	...	...	3,05	...	1,43	...	...	...
4	...	88,85	...	5,76	...	56	...	...	...	10,13	...	3,56	...	...	...
...	...	10	...	18	...	...	...	...	...	71	...	11	...	...	...
26	...	1,36,36	93	1,52,74	69	11,44	4	30	1	1,95,87	8,16	69,37	64	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
91	...	70	1	1,46	2	6	...	...	...	4,03	12	45	...	...	...
91	...	70	1	1,46	2	6	...	...	...	4,03	12	45	...	...	...

the transactions of which do not pass through the Government accounts.

|| Includes expenditure under the four preceding columns.

of this railway (Rs. 2,41,947.) ¶ Includes expenditure under the two subsequent columns.

§§ Excludes the Barsi Road-Pandharpur and the Barsi Town-Tadwala sections, 30·67 and 26·70 miles, respectively, on which work has not been commenced.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay **in thousands of rupees** *on each railway to the close of the year*

(Referred to in paragraphs

Number. Main head.	Number. Sub-head.	Railway.	Length of line. Open. Single track.	Open. Double track.	Open. Total.	Under construction. Single track.	Under construction. Double track.	Under construction. Total.	I.—Preliminary expenses. Open.	I.—Preliminary expenses. Under construction.
		PART II—*continued.*	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.		
		IV.—Native State lines.								
		(a) Worked by Native States.								
14	(a)	Bhavnagar-Gondal-Junagad-Porbandar 3′ 3¾″ gauge	334·19	...	334·19	...	...	...	1,19	...
18	(b)	Bikaner „	245·35	...	245·35	...	...	...	25	...
14	(b)	Dhrangadra „	20·83	...	20·83	...	...	...	6	...
14	(c)	Jamnagar „	54·22	...	54·22	...	...	...	19	...
14	(d)	Jetalsar-Rajkot „	46·21	...	46·21	...	...	...	14	...
18	(a)	Jodhpur „	454·94	...	454·94	...	...	...	82	...
22	(a)	Udaipur-Chitor „	67·30	...	67·30	...	...	...	8	...
30	(a)	Morvi 2′ 6″ gauge	94·36	...	94·36	...	...	...	18	†11
		Total	1,317·40	...	1,317·40	...	...	...	2,91	11
		(b) Worked by Companies.								
6	(b)	Bhopal-Itarsi (Native State section) 5′ 6″ gauge	44·28	...	44·28	...	...	...	Details	included
6	(c)	Bhopal-Ujjain „	113·27	...	113·27	...	...	...	95	...
6	(d)	Bina-Goona-Baran „	145·63	...	145·63	...	...	...	92	...
7	(b)	Kolar Gold-fields „	9·88	...	9·88	...	...	...	8	...
3	(c)	Nagda-Ujjain „	34·32	...	34·32	...	...	...	11	...
8	(a)	Nizam's Guaranteed State „	330·13	...	330·13	...	...	...	1,85	...
3	(d)	Petlad-Cambay (Anand-Tarapur section) „	21·50	...	21·50	...	...	...	11	...
3	(e)	Petlad-Cambay (Tarapur-Cambay section) „	10·92	...	10·92	...	...	...	5	...
21	(b)	Birur-Shimoga 3′ 3⅜″ gauge	37·92	...	37·92	...	...	...	18	...
3	(i)	Gaekwar's Mehsana „	92·63	...	92·63	...	...	...	14	...
21	(d)	Hindupur (Yesvantpur-Mysore frontier) „	51·35	..	51·35	...	...	...	64	...
8	(e)	Hyderabad-Godavari Valley „	391·42	...	391·42	...	...	...	4,26	...
21	(e)	Kolhapur „	29·27	...	29·27	...	...	...	14	...
21	(f)	Mysore-Nanjangud „	15·80	...	15·80	...	...	...	15	...
3	(j)	Palanpur-Deesa (Native State section) „	...	...	Details included with the British section.					...
7	(e)	Shoranur-Cochin „	64·75	...	64·75	...	...	...	50	...
3	(l)	Vijapur-Kalol-Kadi „	41·37	...	41·37	...	...	...	7	...
3	(m)	Gaekwar's Dabhoi 2′ 6″ gauge	88·00	...	88·00	6·49	...	6·49	37	3
2	(c)	Patlakimedi Light „	24·62	...	24·62	...	...	...	4	...
3	(n)	Rajpipla „	37·37	...	37·37	...	...	...	15	...
6	(f)	Gwalior Light 2′ 0″ gauge	126·14	...	126·14	57·86	...	57·86	14	16
		Total	1,710·57	...	1,710·57	64·35	...	64·35	10,85	19
		(c) Worked by State railway agency.								
9	(b)	Jammu and Kashmir (Native State section) 5′ 6″ gauge	15·92	...	15·92	...	...	...	24	...
9	(c)	Ludhiana-Dhuri-Jakhal „	78·66	...	78·66	...	...	...	36	...
9	(d)	Rajpura-Bhatinda „	107·05	...	107·05	...	...	...	59	...
4	(e)	Cooch-Behar 2′ 6″ gauge	33·60	...	33·60	...	...	...	11	...
		Total	235·23	...	235·23	...	...	...	1,30	...
		V.—Lines in Foreign Territory.								
20	(b)	Karaikkal-Peralam 3′ 3⅜″ gauge	14·65	...	14·65	...	...	...	4	...
20	(c)	Pondicherry „	7·85	...	7·85	...	...	...	...	...
21	(h)	West of India Portuguese „	51·11	...	51·11	...	...	...	91	...
		Total	73·61	...	73·61	...	...	...	95	...
		VI.—Lines wholly under construction. By Private Companies.								
23	(a)	Baraset-Basirhat Light 2′ 6″ gauge	...	...	...	26·00	...	26·00	...	...
27	(a)	Dwara-Therria Light „	...	...	...	‡13·50	...	13·50	...	...
		Total	...	...	...	‡39·50	...	39·50	...	...
		VII.—By Native States.								
3	(o)	Jaipur (Siwai-Madhopur) 3′ 3⅜″ gauge	...	...	...	72·85	...	72·85	...	3
26	(a)	Cutch 2′ 6″ gauge	...	...	...	11·86	...	11·86	...	...
2	(c)	Moharbhanj „	...	...	...	32·10	...	32·10	...	...
		Total	...	...	...	116·81	...	116·81	...	3
		Total Part II	5,368·87	...	5,368·87	511·65	...	511·65	58,04	2,20
		Grand Total	25,288·25	1,563·04	26,851·29	2,451·14	0·60	2,451·74	3,05,09	20,85

Note.—Part II includes all railways

† The existing line is under conversion to metre gauge.

‡ Excludes the Maolong-Therria Ghat section, 6·00 miles, on which commencement of work has not yet been authorized.

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1903, distributed over main heads of expenditure.

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Appendix 8.
Capital outlay.

II.—Land.		III.—Formation.		IV.—Bridge Work.		V.—Fencing.		VI.—Electric Telegraph.		VII.—Ballast and Permanent-way.		VIII.—Stations and Buildings.		IX.—Colliery works.	
Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.
64	...	17,32	...	43,67	...	1,02	...	12	...	50,51	...	26,65	...	...	...
2	...	3,99	...	36	...	5	...	21	...	32,91	...	2,29	...	...	...
1	...	64	...	49	...	5	...	...	...	3,36	...	90	...	...	...
...	...	2,41	...	5,24	...	18	...	...	...	3,01	...	2,02	...	...	...
16	...	2,45	...	2,30	...	67	...	...	...	6,82	...	2,26	...	...	...
2	...	6,46	...	2,97	...	4	...	90	...	68,76	...	6,32	...	...	...
...	...	2,89	...	2,24	...	18	...	...	...	2,30	...	1,82	...	...	...
2	...	6,99	†1,99	...	†76	...	...	...	...	11,24	†6	63	...	...	...
87	...	43,15	1,99	57,27	76	2,19	...	1,23	...	1,90,91	6	42,89	...	...	...
with the British section.															
3	...	8,08	...	17,34	...	82	...	29	...	38,34	...	5,09	...	...	...
2	...	13,93	...	21,49	...	2,75	...	2	...	45,27	...	6,22	...	...	...
32	...	...	...	3,49	...	...	...	3	...	5,12	...	1,64	...	...	...
...	...	1,84	...	4,62	...	15	...	...	...	13,08	...	89	...	...	...
...	...	15,88	...	14,21	...	1,97	...	...	...	69,01	...	22,08	...	...	...
...	...	44	...	88	...	29	...	...	...	7,27	...	1,81	...	...	...
...	...	25	...	45	...	15	...	...	...	4,80	...	1,58	...	...	...
21	...	5,66	...	4,54	...	56	...	...	...	8,02	...	2,59	...	...	...
...	...	3,05	...	5,91	...	63	...	...	...	16,81	...	4,73	...	...	...
26	...	5,53	...	5,41	...	65	...	...	...	9,09	...	1,48	...	...	...
...	...	34,00	...	30,25	...	2,34	...	...	...	69,16	...	25,62	...	...	...
31	...	2,69	...	11,23	...	42	...	...	...	4,91	...	2,29	...	...	...
11	...	1,41	...	99	...	28	...	...	...	2,53	...	63	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3,98	...	8,14	...	13,83	...	79	...	10	...	15,07	...	4,32	...	...	...
...	...	23	...	1,62	...	43	...	...	...	6,48	...	1,79	...	...	...
...	...	...	...	...	1	¶4,36	2	...	...	10,71	44	2,90	1	...	...
10	...	34	...	1,10	...	6	...	2	...	2,88	...	35	...	...	...
...	...	1,28	...	3,93	...	15	...	1	...	4,51	...	94	...	...	...
...	...	5,30	75	1,44	1,06	6	...	...	...	14,37	7,02	1,79	19	...	...
5,34	...	1,08,05	75	1,49,39	1,07	16,86	2	47	...	3,47,43	7,46	88,69	20	...	...
...	...	35	...	1,35	...	2	...	...	...	5,87	...	1,32	...	...	...
...	...	2,29	...	2,41	...	97	...	...	...	27,95	...	4,48	...	...	...
47	...	2,76	...	5,38	...	2,05	...	...	...	41,58	...	10,85	...	...	...
14	...	1,58	...	4,71	...	2	...	2	...	4,48	...	82	...	...	...
61	...	6,98	...	13,85	...	3,06	...	2	...	79,68	...	17,48	...	...	...
...	...	55	...	72	...	29	...	...	...	3,81	...	1,09	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	61,42	...	24,48	...	14	...	75	...	14,77	...	9,34	...	...	...
...	...	61,97	...	25,20	...	43	...	75	...	18,08	...	10,43	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1,81	...	3,06	...	6	...	...	...	1,18	...	2,05	...	...
...	...	...	1	...	8	...	...	...	...	...	75	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1,82	...	3,14	...	6	...	...	...	1,93	...	2,07	...	...
9,60	20	4,21,30	5,50	4,06,15	5,68	36,04	12	14,84	1	11,01,39	17,73	2,83,22	2,91	...	...
4,11,42	37,43	44,32,21	3,46,62	49,12,37	1,11,23	3,99,51	6,78	86,55	8	86,54,75	1,53,37	31,65,85	21,40	25,40	...

the transactions of which do not pass through the Government accounts.

§ Excludes the Madura District and the Shahdara-Saharanpur Light railways, 93·00 and 125·00 miles, respectively, on which work has not been commenced.

¶ Includes expenditure on open line under the two preceding columns.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay **in thousands of rupees** *to the close of the year 1903,*

(Referred to in paragraphs

Number. Main-head.	Number. Sub-head.	Railway.	X.—Plant. Open.	X.—Plant. Under construction.	XI.—Rolling-stock. Open.	XI.—Rolling-stock. Under construction.	XII.—General charges. Open.	XII.—General charges. Under construction.	XIII.—Exchange. Open.	XIII.—Exchange. Under construction.
		PART I—*concluded.*								
		VI.—Branch line companies' rys. assisted by Government under "Rebate" terms.								
5	(e)	South Behar . . . . . 5′ 6″ gauge	3,84	...	...	...	7,86	...	...	...
3	(j)	Tapti Valley . . . . . ″	58	...	...	...	10,20	...	...	...
3	(n)	Ahmedabad-Dholka . . . . 3′ 3⅜″ gauge	6	...	...	...	73	...	...	...
3	(g)	Ahmedabad-Parantij . . . . ″	12	...	...	...	1,60	...	...	...
4	(d)	Mymensingh-Jamalpur-Jagannathganj ″	25	...	...	...	83	...	...	...
		TOTAL .	4,85	...	...	...	21,22	...	...	...
		VII.—Lines wholly under construction—By State agency.								
6	(i)	Agra-Delhi Chord . . . . 5′ 6″ gauge	...	2,54	...	...	...	2,71	...	...
		Moorshedabad Branch . . . . ″	...	1,09	...	...	...	1,54	...	...
		Quetta-Nushki . . . . . ″	...	1,59	...	19	...	1,72	...	...
		TOTAL .	...	5,22	...	19	...	5,97	...	...
		VIII.—By Companies agency.								
7	(f)	Azhikal-Mangalore . . . . 5′ 6″ gauge	...	48	...	...	...	1,50	...	...
21	(i)	Bellary-Rayadrug . . . . 3′ 3⅜″ gauge	...	...	...	...	...	...	...	...
21	(j)	Hospet-Kottur . . . . . ″	...	...	...	...	...	...	...	...
20	(f)	Tinnevelly-Quilon (Travancore) (Native State section) . . . . . 3′ 3⅜″ gauge		2,07	...	1	...	9,49	...	...
7	(h)	Morappur-Dharmapuri . . . . 2′ 6″ gauge	...	1	...	...	...	25	..	...
7	(i)	Tirupattur-Krishnagiri . . . . ″	...	3	...	...	...	31	...	...
		TOTAL .	...	2,59	...	1	...	11,55	...	...
		TOTAL PART I .	5,25,91	25,57	47,01,25	18,46	22,06,01	56,65	1,93,13	...
		PART II—*continued.*								
		I.—Branch line Companies' railways assisted by Government under "Rebate" terms.								
9	(e)	Southern Punjab . . . . . 5′ 6″ gauge.	71	...	...	..	15,68	...	...	...
11	(b)	Noakhali (Bengal) . . . . 3′ 3⅜″ gauge.	...	...	...	...	...	...	...	...
		Total .	71	...	...	...	15,68	...	...	...
		II.—Assisted Companies' lines— (a) Subsidized by the Government of India.								
5	(b)	Delhi-Umballa-Kalka . . . . 5′ 6″ gauge.	2,39	...	...	...	9,14	...	12	...
		Total .	2,39	...	...	...	9,14		12	...
		(b) Subsidized by Local Governments.								
17	(a)	Dibru-Sadiya . . . . . 3′ 3⅜″ gauge.	5,36	...	19,28	...	17,75	...	...	...
36	(a)	Darjeeling-Himalayan . . . 2′ 0″ gauge.	75	...	6,02	...	...	...	...	...
		Total .	6,11	...	25,30	...	17,75	...	...	...
		(c) Subsidized by District Boards.								
18	(a)	Bengal Dooars . . . . . 3′ 3⅜″ gauge	11	...	4,09	...	2,15	...	...	...
25	(a)	Bukhtiarpore-Behar Light . .. 2′ 6″ gauge.	11	...	2,17	...	...	...	...	...
31	(a)	Ranaghat-Krishnagar Light . . ″	38	...	1,33	...	...	...	...	...
34	(a)	Tezpur-Balipara Light . . . ″	31	...	1,60	...	41	...	...	...
37	(a)	Howrah-Amta Light, . . . 2′ 0″ gauge.	76	...	4,62	...	...	...	...	...
38	(a)	Howrah-Sheakhala Light . . ″	36	...	1,68	...	...	...	...	...
		Total .	2,03	...	15,54	...	2,56	...	...	...
		(d) Receiving land only from Government.								
5	(d)	Tarkessur . . . . . 5′ 6″ gauge.	9	...	...	...	...	...	...	...
12	(a)	Bengal and North-Western . . 3′ 3⅜″ gauge	19,88	18	97,21	...	36,42	66	...	...
13	(b)	Bengal Dooars extensions . . ″	1,82	...	7,39	...	7,18	...	...	...
16	(a)	Deoghur . . . . . ″	...	...	...	...	...	...	...	...
12	(b)	Saganli-Raxaul . . . . . ″	23	...	...	...	1,02	...	...	...
24	(a)	Barsi Light . . . . . 2′ 6″ gauge	14	...	4,15	...	99	...	...	...
28	(a)	Kalka Simla . . . . . ″	1,28	...	5,00	...	9,90	...	...	...
19	(c)	Powayan Light . . . . . ″	4	...	1,42	...	20	...	...	...
		Total .	23,43	18	1,15,67	...	55,71	66	...	...
		III.—Unassisted companies' lines.								
17	(b)	Ledo and Tikak-Margherita Colliery 3′ 3⅜″ gauge.	...	...	...	...	...	...	...	...
33	(a)	Tarakeshwar-Magra Light . . 2′ 6″ gauge.	18	...	1,89	...	...	1	...	...
		Total .	18	...	1,89	...	...	1	...	...

Note.—Part II includes all railways, the transactions

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distributed over main heads of expenditure.

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XIV.—Sundries.		XV.—Total.		XVI.—Average cost per mile open.	XVII.—Ferries, etc.		XVIII.—Suspense.		XIX.—Total including ferries and suspense.		XX.—Capital unclassified outlay.	XXI.—Capital expenditure on collieries.	XXII.—Total suspense balance.	XXIII.—Grand Total.
Open.	Under construction.	Open.	Under construction.		Open.	Under construction.	Open.	Under construction.	Open.	Under construction.				
10,72	...	1,20,02	...	1,52	...	...	...	...	1,20,02	...	...	...	...	...
7,71	...	1,30,02	...	84	...	...	...	...	1,30,02	...	...	...	...	...
40	...	10,13	...	30	...	...	...	...	10,13	...	...	...	...	...
74	...	19,89	...	36	...	...	...	...	19,89	...	...	...	...	...
...	...	21,32	...	40	69	...	...	...	22,01	...	...	...	...	...
19,57	...	3,01,38	...	80	69	...	...	...	3,02,07	...	...	...	...	...
...	...	...	21,90	...	...	...	...	29,49	...	51,39	...	...	...	...
...	...	...	11,57	...	...	...	...	18,49	...	30,06	...	...	...	...
...	...	...	17,11	...	...	...	...	4,12	...	21,23	...	...	...	...
...	...	...	50,58	...	...	...	...	52,10	...	1,02,68	...	...	...	...
...	...	...	14,42	...	...	...	...	5,60	...	20,02	...	...	...	...
...	...	...	** 1,18	...	...	...	...	1	...	1,19	...	...	...	...
...	...	...	** 1,38	...	...	...	...	...	...	1,38	...	...	...	...
...	...	...	80,64	...	...	18	...	10,55	...	1,01,37	...	...	...	...
...	...	...	44	...	...	...	...	1,97	...	2,41	...	...	...	...
...	...	...	1,01	...	...	...	...	2,77	...	3,12	...	...	...	...
...	...	...	1,09,07	...	...	18	...	29,24	...	1,29,49	...	...	...	...
4,27,19	—6	2,90,97,07	7,72,37	1,35	1,51,83	1,49	7,94,92	79,54	2,99,91,97	8,53,40	68,38	14,69	12,64	3,09,41,08
9,79	...	2,28,21	...	54	...	...	7	...	2,28,28	...	...	...	...	...
...	...	** 21,05	...	60	...	...	...	...	21,05	...	...	...	...	...
9,79	...	2,49,26	...	54	...	...	7	...	2,49,33	...	...	...	...	...
11,27	...	1,55,70	...	96	...	...	—20	...	1,55,50	...	...	...	...	...
11,27	...	1,55,70	...	96	...	...	—20	...	1,55,50	...	...	...	...	...
2,67	...	80,60	...	1,04	23	...	1,50	...	82,33	...	...	...	...	...
¶4,29	...	34,04	...	67	...	...	2,09	...	36,13	...	...	...	...	...
6,96	...	1,14,64	...	89	23	...	3,59	...	1,18,46	...	...	...	...	...
57	...	25,28	...	69	1,67	...	...	...	26,95	...	...	...	...	...
...	...	7,48	...	40	...	...	...	...	7,48	...	...	...	...	...
...	...	7,44	...	37	...	...	...	...	7,44	...	...	...	...	...
...	...	4,87	...	24	...	...	...	...	4,87	...	...	...	...	...
...	...	12,68	20	44	...	...	...	...	12,68	20	...	...	...	...
6	...	6,15	...	31	...	...	...	...	6,15	...	...	...	...	...
63	...	63,90	20	44	1,67	...	...	...	65,57	20	...	...	...	...
16,50	...	17,94	...	81	...	...	...	...	17,94	...	...	...	...	...
21,90	46	5,74,11	13,64	74	21,36	...	7,29	4,69	6,02,76	18,33	...	...	...	...
6,11	...	77,00	...	66	...	...	2,30	...	79,30	...	...	...	...	...
...	...	** 3,01	...	63	...	...	...	...	3,01	...	...	...	...	...
28	...	10,08	...	56	...	...	1,08	...	11,16	...	...	...	...	...
...	...	12,47	...	58	...	...	12	...	12,59	...	...	...	...	...
9,02	...	1,37,52	...	2,31	...	...	3,81	...	1,41,33	...	...	...	...	...
...	...	2,76	...	23	...	...	...	...	§8,95	...	...	...	...	...
53,81	46	8,34,89	13,64	76	21,36	...	14,60	4,69	8,77,04	18,33	...	...	...	...
...	...	** 16,62	...	1,51	...	...	...	...	16,62	...	...	...	...	...
...	...	9,68	16	81	...	...	16	16	9,84	32	...	...	...	...
...	...	26,30	16	62	...	...	16	16	26,46	32	...	...	...	...

of which do not pass through the Government accounts.

** Details not furnished.

§ Includes (Rs. 6,18,993), expenditure incurred prior to transfer of the working of the line to the Rohilkund and Kumaon Railway Company.

¶ Includes expenditure under the two preceding columns.

Appendix 8.
Capital outlay.

APPEN
(Appendix 11

Capital outlay **in thousands of rupees** *on each railway to the close of the year*
(Referred to in paragraphs

Number. Main-head.	Number. Sub-head.	Railway.	X.—Plant. Open.	X.—Plant. Under construction.	XI.—Rolling Stock. Open.	XI.—Rolling Stock. Under construction.	XII.—General charges. Open.	XII.—General charges. Under construction.	XIII.—Exchange. Open.	XIII.—Exchange. Under construction.
		Part II—*concluded.*								
		IV.—Native State lines.								
		(a) Worked by Native States.								
14	(a)	Bhavnagar-Gondal-Junagad-Porbandar 3′ 3⅜″ gauge.	3,30	...	24,66	...	3,93	...	...	...
18	(b)	Bikaner . . . . . „	28	...	9,56	...	74	...	...	...
14	(b)	Dhrangadra . . . . . „	8	...	4	...	24	...	...	...
14	(c)	Jamnagar . . . . . „	17	...	4,80	...	95	...	...	...
14	(d)	Jetalsar-Rajkot . . . . . „	16	...	...	...	88	...	...	...
18	(a)	Jodhpur . . . . . „	1,98	...	29,36	...	1,68	...	...	...
22	(a)	Udaipur-Chitor . . . . . „	32	...	2,72	...	1,11	...	...	...
30	(a)	Morvi . . . . . 2′ 6″ gauge.	15	†4	3,85	...	1,03	†35	...	...
		Total .	6,44	4	74,49	...	13,51	35	...	...
		(b) Worked by Companies.								
6	(b)	Bhopal-Itarsi (Native State section) 5′ 6″ gauge.	...	...	Details included with the British section.				...	...
6	(c)	Bhopal-Ujjain . . . . . „	21	...	...	...	6,96	...	...	...
6	(d)	Bina-Goona-Baran . . . . . „	58	...	18	...	8,16	...	...	...
7	(b)	Kolar Gold-fields . . . . . „	8	...	...	...	60	...	...	...
3	(c)	Nagda-Ujjain . . . . . „	2	...	...	...	1,70	...	...	...
8	(a)	Nizam's Guaranteed State . . „	4,36	...	53,69	...	11,04	...	...	...
3	(d)	Petlad-Cambay (Anand-Tarapur section) „	4	...	...	...	53	...	...	...
3	(e)	Petlad-Cambay (Tarapur-Cambay section) „	8	...	...	...	19	...	...	...
21	(b)	Birur-Shimoga . . . . . 3′ 3⅜″ gauge.	44	...	...	...	1,63	...	...	...
3	(i)	Gaekwar's Mehsana . . . . . „	33	...	45	...	1,73	...	...	...
21	(d)	Hindupur (Yesvantpur-Mysore frontier) „	36	...	...	...	1,44	...	...	...
8	(c)	Hyderabad-Godavari Valley . . „	3,73	...	38,30	...	17,40	...	...	...
21	(e)	Kolhapur . . . . . „	7	...	...	...	1,20	...	...	...
21	(f)	Mysore-Nanjangud . . . . . „	6	...	...	...	40	...	...	...
3	(j)	Palanpur-Deesa (Native State section) „	...	...	Details included with the British section.				...	...
7	(e)	Shoranur-Cochin . . . . . „	1,59	...	10,30	...	3,77	...	...	...
3	(l)	Vijapur-Kalol-Kadi . . . . 2′ 6″ gauge.	9	...	...	...	1,13	...	...	...
3	(m)	Gaekwar's Dabhoi . . . . . „	10	...	2,83	...	1,52	1	...	...
2	(c)	Parlakimedi Light . . . . . „	10	...	1,48	...	64	...	...	...
3	(n)	Rajpipla . . . . . „	7	...	1,35	...	65	...	...	...
6	(f)	Gwalior Light . . . . . 2′ 0″ gauge.	28	7	3,47	1,47	1,31	85	...	...
		Total .	12,59	7	1,12,05	1,47	62,02	86	...	...
		(c) Worked by State Railway Agency.								
9	(b)	Jammu and Kashmir (Native State section) 5′ 6″ gauge	5	...	...	...	64	...	...	...
9	(c)	Ludhiana-Dhuri-Jakhal . . . „	44	...	...	...	2,80	...	...	...
9	(d)	Rajpura-Bhatinda . . . . . „	82	...	...	...	2,69	...	...	...
4	(e)	Cooch-Behar . . . . . 2′ 6″ gauge.	16	...	1,88	...	82	...	...	...
		Total .	1,47	...	1,88	...	6,42	...	...	...
		V.—Lines in Foreign Territory.								
20	(b)	Karaikkal-Paralam . . . . 3′ 3⅜″ gauge.	9	...	...	...	1,15	...	...	...
20	(c)	Pondicherry . . . . . „	...	...	...	...	...	...	...	...
21	(h)	West of India Portuguese . . „	2,89	...	7,47	...	13,60	...	...	...
		Total .	2,98	...	7,47	...	14,75	...	...	...
		VI.—Lines wholly under construction—By Private Companies.								
23	(a)	Baraset-Basirhat Light . . . 2′ 6″ gauge.	...	...	...	...	...	...	...	...
27	(a)	Dwara-Therria Light . . . . „	...	...	...	...	...	...	...	...
		Total .	...	...	...	...	...	...	...	...
		VII.—By Native States.								
3	(o)	Jaipur (Siwai-Madhopur) . . 3′ 3⅜″ gauge.	...	5	...	...	...	59	...	...
26	(a)	Cutch . . . . . 2′ 6″ gauge.	...	1	...	12	...	5	...	...
2	(e)	Moharbhanj . . . . . „	...	...	...	...	...	...	...	...
		Total .	...	6	...	12	...	64	...	...
		TOTAL PART II .	58,38	35	3,54,29	1,59	1,99,54	2,52	12	...
		GRAND TOTAL .	5,84,29	25,92	50,55,54	20,05	24,05,55	59,17	1,98,25	...

NOTE.—Part II includes all railways, the transactions of

* Includes Rs. 2,30,30,000 paid on account of purchase of this railway.

† The existing line is under conversion to metre gauge.

DIX 8—*concluded.*
in Report for 1902.)

Appendix 8.
Capital outlay.

1903, distributed over main heads of expenditure.
6 to 8 of Report.)

XIV.—Sundries.		XV.—Total.		XVI.—Average cost per mile open.	XVII.—Ferries.		XVIII.—Suspense.		XIX.—Total including ferries and suspense.		XX.—Capital unclassified outlay.	XXI.—Capital expenditure on collieries.	XXII.—Total suspense balance.	XXIII.—Grand Total.
Open.	Under construction.	Open.	Under construction.		Open.	Under construction.	Open.	Under construction.	Open.	Under construction.				
...	...	1,76,01	...	54	...	...	3,52	...	1,81,53	...	...	...	...	...
...	...	50,66	...	21	...	...	65	...	51,31	...	...	...	...	...
...	...	5,87	...	28	...	...	...	...	5,87	...	...	...	...	...
...	...	23,47	...	46	...	...	11	...	23,58	...	...	...	...	...
...	...	15,79	...	34	...	...	...	...	15,79	...	...	...	...	...
...	...	1,19,31	...	26	...	...	...	...	1,19,31	...	...	...	...	...
...	...	20,66	...	31	...	...	...	...	20,66	...	...	...	...	...
...	...	24,09	†8,31	36	...	...	48	...	24,57	†8,31	...	...	...	...
...	...	4,37,36	8,31	33	...	...	4,76	...	4,42,62	8,31	...	...	...	...
...	...	50,00	...	†1,41	...	...	...	...	50,00	...	...	...	...	...
...	...	78,11	...	69	...	...	...	...	78,11	...	...	...	...	...
6	...	99,62	...	68	...	...	...	...	99,62	...	...	...	...	...
...	...	11,36	...	1,15	...	...	26	...	11,62	...	...	...	...	...
...	...	22,41	...	65	...	...	...	...	22,41	...	...	...	...	...
...	...	*4,24,39	...	1,29	...	...	5,74	...	4,30,13	...	...	...	...	...
...	...	11,37	...	53	...	...	11	...	11,48	...	...	...	...	...
...	...	7,50	...	69	...	...	...	...	7,50	...	...	...	...	...
...	...	23,83	...	63	...	...	24	...	24,07	...	...	...	...	...
...	...	33,78	...	36	...	...	...	...	33,78	...	...	...	...	...
...	...	24,92	...	49	...	...	5	...	24,97	...	...	...	...	...
33,67	...	2,59,33	...	66	...	...	2,74	...	2,62,07	...	...	...	...	...
...	...	23,26	...	79	...	...	...	...	23,26	...	...	...	...	...
...	...	6,56	...	42	...	...	...	...	6,56	...	...	...	...	...
...	...	1,85	...	†24	...	...	...	...	1,85	...	...	...	...	...
...	...	62,39	...	98	86	...	1,16	...	64,41	...	...	...	...	...
...	...	11,84	...	29	...	...	...	...	11,84	...	...	...	...	...
...	...	22,79	52	26	...	...	27	2	23,06	54	...	...	...	...
...	...	7,11	...	29	...	...	...	...	7,11	...	...	...	...	...
...	...	13,04	...	35	...	...	...	...	13,04	...	...	...	...	...
88	...	29,04	11,57	23	...	...	...	1,16	29,04	12,73	...	...	...	...
34,61	...	12,24,50	12,09	72	86	...	10,57	1,18	12,35,93	13,27	...	...	...	...
...	...	9,62	...	60	...	...	...	...	9,62	...	...	...	...	...
...	...	41,20	...	52	...	...	...	...	41,20	...	...	...	...	...
...	...	67,19	...	63	...	...	...	...	67,19	...	...	...	...	...
...	...	14,74	...	44	4	...	13	...	14,91	...	...	...	...	...
...	...	1,32,75	...	56	4	...	13	...	1,32,92	...	...	...	...	...
...	...	7,24	...	49	...	...	...	...	7,24	...	...	...	...	...
...	...	**5,69	...	72	...	...	...	...	5,69	...	...	...	...	...
...	...	1,35,77	...	2,66	...	...	1,99	...	1,37,76	...	...	...	...	...
...	...	1,48,70	...	2,02	...	...	1,99	...	1,50,69	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	8,24	...	...	...	...	...	...	8,24	...	...	...	...
...	...	...	8,24	...	...	...	...	...	...	8,24	...	...	...	...
...	...	...	8,83	...	...	...	...	5	...	8,88	...	...	...	...
...	...	...	1,04	...	...	...	...	...	...	1,04	...	...	...	...
...	...	...	2,11	...	...	...	...	...	...	2,11	...	...	...	...
...	...	...	11,98	...	...	...	...	5	...	12,03	...	...	...	...
1,17,07	46	33,88,50	49,62	63	24,16	...	35,67	6,08	34,54,52	55,70	‖8,08	...	...	35,18,30
5,44,26	40	3,24,85,57	8,21,99	1,21	1,75,99	...	1,49	8,30,59	85,62	3,34,46,49	9,09,19	76,46	14,69	12,64	3,44,59,38

hich do not pass through the Government accounts.
* Details not furnished.
State expenditure on the Patri branch of the Bombay, Baroda and Central India railway.
‡ Calculated on the total outlay on the line.

Appendix 9.
Capital liability.

APPENDIX 9.

Capital liability on account of Railways classed as State Railways at end of 1903.

Referred to in paragraph 28 of report.

Railways.	(1) Share Capital of purchased Railways being paid off by Annuities.						(2)	(3)	(4)	(5)	(6)
		Deduct.									
	Commuted value of stock purchased. (a)	Amount redeemed by Annuity payments. (b)	Unredeemed capital in respect of Annuities purchased by creation of debt (liability included in column 3). (c)	Great Indian Peninsula Railway Annuity exchanged for New Stock of that Railway (liability included in column 5). (d)	Total deductions. (e)	Net outstanding.	State outlay.	Debt incurred for purchase of Railways.	Capital advanced by Government to Companies.	Capital raised by Companies on Secretary of State's guarantee (including over drafts).	Total capital liability.
India, General.	£	£	£	£	£	£	£	£	£	£	
1. East Indian	32,750,000	2,670,932	6,703,872	...	9,374,804	23,375,196	6,513,333	7,880,999	...	5,200,300	4
2. Rajputana-Malwa (incldg. Godhra-Rutlam Nagda).	...	...	...	...	...	...	10,487,151	...	...	...	10
3. Rewari-Phulera	...	...	...	...	...	...	38,497	...	...	...	38,4
4. Palanpur-Deesa	...	...	...	...	...	...	15,804	...	...	...	15,8
5. Bhopal	...	...	...	...	...	...	206,180	...	...	...	206,180
6. State railway stores	...	...	...	...	...	...	1,562	...	...	...	1,562
7. Exchange in England for stores, purchased and remaining unappropriated.	...	...	...	...	...	...	82,712	...	...	...	82,712
Central Provinces.											
8. Wafora Colliery	...	...	...	...	...	...	97,902	...	...	...	97,902
9. Umaria, ,, (depreciation on works).	...	...	...	...	...	...	12,178	...	...	...	12,178
10. Bilaspur-Etawah	...	...	...	...	...	...	5,006	...	...	...	5,006
11. Nagpur-Chhatisgarh (depreciation account).	...	...	...	...	...	...	43,802	...	...	...	43,802
Assam.											
12. Jorhat	...	...	...	...	...	...	60,223	...	...	...	60,223
Bengal.											
13. Eastern Bengal system	3,391,917	241,275	505,123	...	746,398	2,645,519	8,106,652	881,595	...	...	11,633,766
14. Murshidabad Branch	...	...	...	...	...	...	200,422	...	...	...	200,422
15. Dhubri-Gauhati	...	...	...	...	...	...	33,405	...	...	...	33,405
16. Tirhoot	...	...	...	...	...	...	3,389,994	...	...	...	3,389,994
17. Ranaghat-Bhagwangola	...	...	...	...	...	...	20,163	...	...	...	20,163
United Provinces.											
18. Oudh and Rohilkhand	...	...	...	...	...	...	2,931,647	10,737,726	...	...	13,669,373
19. Allahabad-Fyzabad	...	...	...	...	...	...	588,571	...	...	...	588,571
20. Agra-Delhi Chord	...	...	...	...	...	...	342,599	...	...	...	342,599
Punjab.											
21. North Western	14,009,124	919,787	4,588,773	...	5,508,560	8,500,564	26,951,992	4,290,468	...	...	39,743,024
22. Khusalgarh-Kohat-Thal	...	...	...	...	...	...	378,047	...	...	...	378,047
23. Jech Doab (northern sec.)	...	...	...	...	...	...	126,407	...	...	...	126,407
24. ,, ,, (southern sec.)	...	...	...	...	...	...	3,179	...	...	...	3,179
25. Quetta-Nushki	...	...	...	...	...	...	141,510	...	...	...	141,510
26. Peshawar Railway Reserve	...	...	...	...	...	...	19,256	...	...	...	19,256
27. Frontier Railway Reserve	...	...	...	...	...	...	293,188	...	...	...	293,188
28. Petroleum Operations, Baluchistan.	...	...	...	...	...	...	7,946	...	...	...	7,946
29. Jullunder Hoshiarpur	...	...	...	...	...	...	969	...	...	...	969
30. Ludhiana-Ferozepur	...	...	...	...	...	...	1,887	...	...	...	1,887
Madras.											
31. South Indian	...	...	...	...	...	...	1,748,387	4,726,168	...	1,000,000	7,475,055
32. Marina Loop	...	...	...	...	...	...	6,917	...	...	...	6,917
33. ,, Madura Pamban	...	...	...	...	...	...	64,591	...	...	375,000	439,591
34. Tinnevelly-Quilon (British section).	...	...	...	...	...	...	36,253	...	...	219,225	255,478
35. Tinnevelly-Quilon (Native) state section).	...	...	...	...	...	...	267,057	...	...	405,775	672,832
36. Azhikal-Mangalore	...	...	...	...	...	...	133,489	...	...	...	133,489
37. East Coast (northern section)	...	...	...	...	...	...	2,061,962	...	...	...	2,061,962
38. North-East line, Madras railway.	...	...	...	...	...	...	4,225,567	...	...	...	4,225,567
39. Nilgiri	...	...	...	...	...	...	234,951	...	...	...	234,951
40. Bezwada extension	...	...	...	...	...	...	78,470	...	...	...	78,470
41. Guntakal-Mysore frontier	...	...	...	...	...	...	393,813	...	...	...	393,813
42. Tanjore District Board	...	...	...	...	...	...	183,279	...	82,315	41,133	306,727
43. Vizagapatam-Raipur	...	...	...	...	...	...	16,336	...	...	...	16,336
44. Hospet-Kottur	...	...	...	...	...	...	9,188	...	...	...	9,188
45. Bellary-Rayadrug	...	...	...	...	...	...	7,930	...	...	...	7,930
46. Tirupattur-Krishnagiri	...	...	...	...	...	...	20,815	...	...	...	20,815
47. Morappur-Dharmapuri	...	...	...	...	...	...	16,080	...	...	...	16,080
Bombay.											
48. Great Indian Peninsula	34,859,218	1,249,683	...	1,750,000	2,999,683	31,859,535	1,698,800	5,905,524	...	2,575,000	42,038,859
49. Jodhpur-Hyderabad (British section).	...	...	...	...	...	...	263,946	...	...	...	263,946
50. Southern Mahratta (depreciation on works).	...	...	...	...	...	...	35,138	...	...	...	35,138
51. Sabarmati-Dholka	...	...	...	...	...	...	3,993	...	...	...	3,993
52. Lower Sindh Extension	...	...	...	...	...	...	30,195	...	...	...	30,195
	85,010,259	5,081,677	11,797,768	1,750,000	18,629,445	66,380,814	72,639,841	34,422,480	82,315	10,416,433	183,941,883
Leased Lines.											
Assam-Bengal	...	...	...	...	...	...	4,772,158	...	...	2,855,900	7,628,058
Bengal Central	...	...	...	...	...	...	...	...	518,259	500,000	1,018,259
Bengal-Nagpur	...	...	...	...	...	...	...	...	7,595,467	7,821,340	15,416,807
Burma	...	...	...	...	...	...	5,127,488	...	...	3,353,528	8,481,016
Indian Midland	...	...	...	...	...	...	...	...	1,831,188	5,935,550	7,766,738
Lucknow-Bareilly	...	...	...	...	...	...	341,409	...	289,772	147,000	778,181
Mysore	...	...	...	...	...	...	...	...	...	1,200,000	1,200,000
Southern Mahratta	...	...	...	...	...	...	1,105,228	...	2,129,900	4,693,100	7,928,228
	...	...	...	...	...	...	11,346,283	...	12,364,586	26,506,418	50,217,287
Branch Line.											
Hardwar-Dehra	...	...	...	...	...	...	...	...	...	189,636	189,636
Brahmaputra-Sultanpur	...	...	...	...	...	...	...	...	...	196,166	196,166
	...	...	...	...	...	...	...	...	...	385,802	385,802
Total	85,010,259	5,081,677	11,797,768	1,750,000	18,629,445	66,380,814	83,986,124	34,422,480	12,446,901	37,308,653	234,544,972

APPENDICES
OF
STATISTICS.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Appendix 10.
Main results.

Main results of working Indian railways

(Referred to in paragraphs

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on Capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1853 .	20	37,96	90	41	49	87	45·56	1·29	...	...	...	...	...	...
1854 .	71	4,00,00	2,31	1,42	89	63	61·47	0·22	...	...	...	...	...	...
1855 .	169	5,50,00	8,13	4,55	3,58	93	55·97	0·65	...	...	...	...	...	...
1856 .	272	8,00,00	16,10	6,74	9,36	114	41·87	1·17	...	...	...	...	...	...
1857 .	287	12,00,00	25,43	10,54	14,89	170	41·45	1·24	...	...	...	...	...	...
1858 .	427	16,00,00	33,82	15,63	18,19	152	46·22	1·14	...	...	...	...	...	...
1859 .	625	22,50,00	57,24	27,74	29,50	176	48·46	1·31	...	...	...	...	...	...
1860 .	833	26,66,00	66,67	37,08	29,59	153	55·61	1·11	...	...	...	...	...	...
1861 .	1,587	34,00,00	93,63	58,09	40,54	120	58·90	1·19	...	...	...	...	...	...
1862 .	2,333	48,00,00	1,34,15	80,32	54,13	111	59·74	1·13	...	...	...	...	...	...
1863 .	2,507	53,00,00	2,20,47	1,33,04	87,43	169	60·34	1·65	...	...	...	...	...	...
1864 .	2,958	58,00,00	2,85,89	1,70,85	1,15,04	186	59·76	1·93	...	...	...	...	...	...
1865 .	3,363	63,00,00	4,25,84	2,24,27	2,01,57	244	52·43	3·20	...	...	...	...	...	...
1866 .	3,563	70,00,00	4,91,91	2,59,38	2,32,53	266	52·73	3·32	...	...	...	...	...	...
1867 .	3,929	80,00,00	5,44,54	2,93,76	2,50,78	266	53·95	3·13	...	...	...	...	...	...
1868 .	4,008	84,00,00	5,67,09	3,07,46	2,59,63	272	54·22	3·09	...	...	...	...	...	...
1869 .	4,255	89,00,00	6,13,10	3,41,74	2,71,36	277	55·74	3·05	...	...	...	...	...	...
1870 .	4,771	90,00,50	6,66,67	3,63,15	3,03,52	269	54·47	3·37	...	...	...	...	...	
1871 .	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55·82	3·24	19,283	2,02,40	...	3,542	4,20,03	...
1872 .	5,369	90,00,90	6,82,96	3,73,45	3,09,51	245	54·68	3·44	20,847	2,17,66	...	3,535	4,13,70	14·1
1873 .	5,697	91,72,60	7,22,90	3,77,85	3,45,05	244	52·28	3·76	22,885	2,39,41	...	4,078	4,68,22	14·(
1874 .	6,226	95,87,15	8,33,77	4,03,89	4,29,88	258	48·44	4·48	24,977	2,38,93	...	5,503	5,75,30	10·(
1875 .	6,541	1,00,96,28	7,91,37	3,97,48	3,93,89	233	50·23	3·90	27,479	2,68,32	...	5,095	5,12,56	10·(
1876 .	6,860	1,04,77,85	9,33,83	4,46,45	4,87,38	262	47·81	4·65	31,353	3,18,61	...	6,613	5,74,04	8·
1877 .	7,320	1,09,04,24	12,11,28	5,38,68	6,72,60	318	44·47	6·17	35,104	3,29,33	...	9,272	9,00,23	8·
1878 .	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49·97	4·76	39,458	3,37,87	...	8,320	7,28,95	8·

* The decrease is due to a revised method having been adopted

DIX 10.

as one system from the commencement.

17, 18 and 22 of Report.)

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1879 .	8,475	1,22,32,97	12,06,15	6,26,28	5,81,87	275	51·94	4·76	44,050	3,65,86	...	8,968	7,80,61	8·65
1880 .	8,996	1,28,56,91	12,86,55	6,48,00	6,38,55	282	50·37	4·97	49,155	4,57,29	...	10,394	9,22,63	9·68
1881 .	9,858	1,40,80,30	14,32,31	7,07,12	7,25,19	285	49·37	5·16	54,764	3,79,23	2·78	13,214	9,55,97	7·95
1882 .	10,069	1,43,24,42	15,35,23	7,66,81	7,68,42	294	49·95	5·36	58,876	4,08,37	2·71	14,833	10,15,97	7·91
1883 .	10,447	1,48,30,56	16,38,94	7,97,05	8,41,89	301	48·62	5·68	65,099	4,09,08	2·60	16,999	11,28,89	7·30
1884	11,527	1,55,45,04	16,03,62	8,15,62	7,91,00	276	50·76	5·09	73,815	4,46,84	2·56	16,663	10,56,59	7·35
1885 .	12,208	1,61,91,78	17,98,96	8,86,33	9,12,63	284	49·27	5·64	80,865	4,78,12	2·52	18,925	11,91,54	6·89
1886 .	12,865	1,70,19,89	18,70,46	8,93,10	9,77,36	285	47·75	5·73	88,436	5,09,77	2·51	19,576	12,38,59	7·02
1887 .	14,068	1,82,87,93	18,46,81	9,10,33	9,36,48	260	49·31	5·12	95,412	5,35,32	2·51	20,196	11,92,93	7·17
1888 .	14,525	1,93,04,33	19,76,45	9,87,44	9,89,01	263	49·96	5·12	103,156	5,69,06	2·71	22,393	12,79,04	6·87
1889 .	15,900	2,05,04,61	20,49,37	10,37,74	10,11,63	257	50·64	4·93	110,650	6 13,74	2·52	22,249	13,05,56	6·88
1890 .	16,404	2,13,67,04	20,67,01	10,30,39	10,36,12	243	49·87	4·85	114,082	6,25,31	2·51	22,613	12,99,52	7·11
1891 .	17,263	2,21,06,42	24,04,13	11,30,39	12,73,64	271	47·02	5·76	122,855	6,86,13	2·52	26,159	15,60,31	6·75
1892 .	17,769	2,27,80,00	27,22,93	10,90,35	12,32,58	253	46·94	5·42	127,388	6,91,15	2·52	26,335	14,77,52	6·70
1893 .	18,459	2,33,17,87	24,08,42	11,34,77	12,73,65	254	47·12	5·46	135,520	7,29,57	2·50	23,847	15,21,63	6·60
1894 .	18,840	2,37,79,01	25,50,89	11,98,40	13,52,49	262	46·98	5·69	145,727	7,57,58	2·56	32,644	16,24,52	5·42
1895 .	19,467	2,44,38,05	26,23,69	12,11,99	14,11,70	261	46·19	5·78	153,081	8,02,21	2·49	33,623	16,36,94	6·36
1896 .	20,209	2,48,95,23	25,36,14	12,13,84	13,22,30	245	47·86	4·92	159,509	8,22,07	2·45	32,471	15,41,51	6·45
1897 .	21,115	2,52,12,04	25,60,11	12,47,73	13,12,38	233	48·74	4·65	150,584	7,62,13	2·47	33,926	15,88,89	6·36
1898 .	22,024	2,92,00,20	27,41,31	12,98,68	14,42,63	244	47·37	4·94	151,566	7,58,68	2·50	35,642	17,84,97	6·00
1899 .	23,507	3,08,56,12	29,36,78	13,93,36	15,43,42	246	47·45	5·00	161,720	8,09,39	2·51	39,748	19,19,82	5·98
1900 .	24,704	3,29,53,34	31,54,32	15,09,31	16,45,01	250	47·85	4·99	176,303	8,95,07	2·51	42,896	20,36,52	5·88
1901 .	25,332	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46·79	5·27	194,749	10,07,17	2·48	43,392	21,23,67	5·77
1902 .	25,898	3,49,77,34	33,92,69	16,70,49	17,22,20	254	49·24	4·92	196,648	10,27,48	2·51	45,537	21,23,41	5·68
1903 .	26,851	3,41,11,23	36,00,82	17,11,09	18,89,73	257	47·52	5·54	210,231	10,98,14	2 51	47,684	22,41,92	5·64

showing the capital outlay on railways purchased by the State from Guaranteed Railway Companies.

Appendix 11.
Summary of general results.

APPEN
(Appendix 12
Summary of the general
Indian Railways
(Referred to in paragraphs

GENERAL RESULTS

Calendar year.	Total mileage open on 31st December.	Mean mileage worked.	Total Capital outlay in thousands of rupees. *	Gross earnings in thousands of rupees.	Total working expenses.	
					Amount in thousands of rupees.	Proportion per cent. to gross earnings.
1	2	3	4	5	6	7
1899	23,507 (‖)	22,847	3,06,50,12	29,36,78	13,93,36	47·45
1900	24,704 (¶)	24,115	3,29,53,34	31,54,32	15,09,31	47·85
1901	25,332 (¶¶)	25,279	3,39,16,89	33,60,38	15,72,45	46·79
1902	25,898 (¶¶)	25,571	3,49,77,34	33,92,69	16,70,49	49·24
1903	26,851 (***)	26,618	3,41,11,23†††	36,00,82	17,11,09	47·52

GROSS EARNINGS IN THOUSANDS

Calendar year.	Coaching traffic.							Goods		
	1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 18 to 23).	Total Goods Traffic (sum of 26 to 30).	General merchandise.	Coal and coke for the public and foreign railways.
17	18	19	20	21	22	23	24	25	26	27
1899	31,52	46,97	52,08	6,70,81	8,01	1,13,19	9,22,58	19,19,82	16,10,55	1,80,41
1900	31,68	47,08	56,03	7,51,66	8,47	1,31,37	10,26,44	20,36,52	16,90,35	2,11,71
1901	32,78	52,43	64,39	8,48,25	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41‡‡‡	17,40,72	2,26,75
1903	41,56	58,13	71,68	9,16,31	10,46	1,56,26	12,54,40	22,41,92‡‡‡	18,53,45	2,29,93

Number of passengers and quantity of goods carried, the average miles

PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND

Calendar year.	Total mileage open on 31st December.	1st Class.			2nd Class.			Intermediate Class.			3rd Class.		
		No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡	No.	Average miles carried. ‡	Average rate charged per mile in pies. ‡
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899	23,507	526	71·78	12·59	2,352	43·90	5·32	5,233	60·56	3·07	140,321	37·58	2·30
1900	24,704	521	74·65	12·59	2,285	44·04	5·49	5,703	58·93	3·11	153,954	39·16	2·31
1901	25,332	532	92·82	12·75	2,405	76·27	5·49	6,620	59·94	3·09	170,416	41·27	2·31
1902	25,898	563	102·28	12·86	2,530	82·39	5·21	6,813	61·30	3·11	171,716	41·08	2·33
1903	26,948	594	101·71	13·21	2,580	78·13	5·54	7,214	61·64	3·09	184,292	40·94	2·33

* Excludes railways wholly under construction,
† This column represents the percentage of net
‡ Including season and vendors' tickets for 1899 and
** Included in the several classes up to 1900.
†† Includes miscellaneous train-mileage.
§ "Other expenses" includes Steam-boat, Contribut
‡‡ Excludes the Cherra-Companyganj and Thaton-
¶ Excludes the Thaton-Duyinzaik and Powayan
¶¶ Excludes the Thaton-Duyinzaik and Parlakimedi
*** Excludes the Thaton-Duyinzaik Light railway and
††† The decrease is due to the revision of the Capital
‡‡‡ Excludes Rs. 5,74,000 of the Cawnpore-Burhwal
§§ Includes the total working expenses of the Powayan

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in Report for 1902.)

results of working.

treated as one system.

17, 18, 22 and 25 of Report.)

Appendix 11.

Summary of general results.

OF WORKING.

NET EARNINGS.		PER MILE WORKED (EXCLUDING STEAM-BOAT).			PER TRAIN-MILE (EXCLUDING STEAM-BOAT).			Calendar year.
Amount in thousands of rupees.	Percentage on Capital outlay.†	Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
8	9	10	11	12	13	14	15	16
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
15,43,42	5·00	12,788	6,055	6,733	3·78	1·79	1·99	1899
16,45,01	4·99	13,007	6,204	6,803	3·73	1·78	1·95	1900
17,87,93	5·27	13,236	6,179	7,057	3·79	1·77	2·02	1901
17,22,20	4·92	13,188	6,472	6,718	3·65	1·79	1·86	1902
18,89,73	5·54	13,461	6,371	7,090	3·73	1·77	1·96	1903

OF RUPEES.

TRAFFIC.					WORKING EXPENSES IN THOUSANDS OF RUPEES.						Calendar year.
Military stores.	Revenue stores, including coal and material for construction.	Miscellaneous.	Electric telegraph.	Steam-boat and sundries.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Other expenses. §	
28	29	30	31	32	33	34	35	36	37	38	39
13,11	94,11	21,64	8,70	85,68	3,42,50	4,71,44	1,33,98	2,30,68	1,42,38	72,38	1899
13,78	93,32	27,56	7,93	88,43	3,61,79	5,26,50	1,39,31	2,49,27	1,47,43	85,01	1900
14,97	96,41	24,14	7,49	87,34	3,55,93	5,59,13	1,51,90	2,63,92	1,57,85	83,72§§	1901
21,67	1,14,93	25,08	7,32	86,88	3,89,67	5,78,85	1,76,38	2,73,70	1,63,70	88,19	1902
23,07	1,13,90	27,31	7,84	96,66	3,88,99	6,11,95	1,52,51	2,92,19	1,68,91	96,54§§	1903

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED.					TRAIN-MILES RUN (IN THOUSANDS).				GOODS TRAFFIC.			Calendar year.
SEASON AND VENDORS' TICKETS.			TOTAL NO. OF PASSENGERS CARRIED.		Coaching.	Goods.	Mixed.	Total train-mileage. (††)	Tons carried (in thousands).	Average miles carried.	Average rate charged per mile in pies.	
No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.								
15	16	17	18	19	20	21	22	23	24	25	26	27
13,288	**	**	161,720	38·48	17,039	30,612	26,889	77,267	39,748	155·15	5·98	1899
13,845	**	**	176,308	40·09	18,114	34,252	28,827	84,193	42,896	154·94	5·88	1900
14,726	8·63	1·41	194,749	40·42	19,701	34,274	31,561	88,265	43,392	162·75	5·77	1901
15,026	8·85	1·41	196,648	40·03	21,708	36,019	31,781	92,527	45,537	157·54	5·68	190
15,551	8·75	1·48	210,231	39·90	25,889	36,308	31,438	95,960	47,684	159·93	5·64	1903

but includes the State outlay on the Patri branch, *vide* paragraph 6 of Report.

earnings on capital outlay, but does not represent the gain or loss to the State, for which information Appendix 13 should be consulted.

1900.

tion to Provident Fund and Special and Miscellaneous expenditure.

Duyinzaik Light railways.

Light railways.

Light railways.

the Damchara-Lumding section of the Assam-Bengal railway.

outlay hitherto adopted for lines purchased by the State from Guaranteed Railway Companies.

metre gauge link cross traffic included in the subsequent details, taken to credit under "Sundry" earnings of the Oudh and Rohilkhand State railway.

Light railway, details of which are not available.

Appendix 12.
General results.

[Appendices 13, 22 to 27

General results of working.

Referred to in para.

Number.		Railway including branches worked.	Mean mileage worked.					Gross earnings: Coaching.					Gross earnings: Goods.					Gross earnings: Electric	
Main head.	Sub-head.		1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	1899.	1900.
		5′6″ gauge.	Miles.	Miles.	Miles.	Miles.	Miles.												
2	(a)	Bengal Central	138·89	138·89	138·89	138·89	138·89	6,94	7,16	7,71	7,79	7,90	3,38	5,26	4,52	4,25	6,00	2	2
3	(a), (b) & (d), (a), (c) to (f), & (m) & (n).	Bengal-Nagpur	1,150·99	1,204·11	1,607·88	1,604·43	1,777·64	21,52	34,26	58,81	59,14	58,26	63,64	91,62	65,79	77,27	89,57	24	26
		Bombay, Baroda and Central India.	684·16	776·97	790·40	740·99	804·56	49,96	55,62	59,66	59,89	62,86	1,28,17	1,32,11	1,08,34	1,06,94	1,15,88	62	55
4	(a).	Eastern Bengal State ...	267·25	268·04	267·49	274·16	272·93	30,30	30,81	32,94	33,22	35,33	55,11	60,16	57,07	64,71	60,98	19	19
		East Coast	786·69	803·13	*	*	*	21,32	26,17	*	*	*	20,54	32,08	*	*	*	16	16
5	(a) to (d)	East Indian	1,970·40	2,115·68	2,130·37	2,187·81	2,231·64	1,96,95	2,16,36	2,28,25	2,19,34	2,29,29	4,47,26	4,79,03	4,91,23	4,73,75	4,84,51	1,18	96
6	(a)	Great Indian Peninsula ...	1,491·31	1,515·64	1,564·96	1,566·19	1,566·48	82,11	88,02	1,00,91	1,09,16	1,12,82	2,72,16	2,52,59	3,13,28	3,11,23	3,52,50	79	72
6	(b) to (f)	Indian Midland	1,117·93	1,260·60	1,260·60	1,277·02	1,305·14	26,36	26,73	29,79	33,44	33,58	51,76	84,60	68,59	75,23	64,85	34	27
7	(a) to (c)	Madras	866·84	854·36	1,355·85	1,377·48	1,399 51	36,15	41,72	61,65	66,04	69,27	69,05	69,27	97,21	94,73	98,65	17	15
8	(a) & (b)	Nizam's Guaranteed State ...	354·70	354·70	354·70	354·70	354·70	8,25	9,25	9,35	9,02	9,36	34,22	42,56	32,87	35,36	35,08	20	16
9	(a) to (h)	North Western State :— Commercial ...	2,499·51	2,579·00	2,663·39	2,682·22	2,702·29	1,12,79	1,20,77	1,32,29	1,39,87	1,57,35	2,23,35	1,78,38	2,73,05	2,71,87	3,25,70	87	8
		Military	1,011·80	1,030·23	1,070·49	1,068·37	1,457·84	13,14	13,93	16,00	17,04	17,36	16,65	17,59	21,59	19,58	21,15	15	15
10	(a) to (c)	Oudh and Rohilkhand State	1,030·36	1,072·22	1,133·60	1,133·65	1,187·48	42,58	48,08	57,35	57,25	61,31	57,89	55,74	66,27	64,75	67,45	30	29
		3′3½″ gauge.																	
11	(a) & (b)	Assam-Bengal	413·46	435·83	579·27	589·21	655·07	9,28	9,78	11,54	11,31	12,20	6,47	6,72	8,80	7,96	10,20	14	13
12	(a) to (c)	Bengal and North-Western...	1,062·50	1,136·89	1,259·90	1,279·85	1,336·55	27,53	31,32	40,16	43,32	§49,66	41,44	40,07	47,17	47,09	§58,21	33	31
13	(a) & (b)	Bengal Dooars	36·40	60·67	108·31	114·16	131·24	54	67	95	1,09	1,33	2,03	2,49	3,41	3,61	4,65	...	1
14	(a) to (d)	Bhavnagar-Gondal-Junagad Porbandar.	455·18	455·18	455·18	455·45	455·45	10,68	10,16	10,57	9,31	10,50	11,09	12,85	7,90	7,09	8,51	21	18
15	(a)	Burma	943·65	1,084·50	1,155·48	1,182·08	1,323·19	43,08	51,32	53,95	56,01	66,55	43,00	57,07	62,73	66,83	66,86	28	26
16	(a)	Deoghur	4·79	4·79	4·79	4·79	4·79	29	31	43	26	37	4	4	5	3	4	...	...
17	(a) & (b)	Dibru-Sadiya	85·00	85·00	88·50	88·50	88·50	1,39	1,51	1,38	1,43	1,42	7,43	7,70	8,18	7,33	7,96	10	11
4	(b) to (e)	Eastern Bengal State ...	649·95	705·00	731·98	744·58	765·74	23,43	28,05	28,30	30,09	33,34	37,63	43,11	41,17	43,82	44,67	16	16
8	(e)	Hyderabad-Godavari Valley...	24·64	290·73	389·25	391·42	391·42	10	3,45	7,83	8,62	7,66	53	6,76	10,87	12,76	13,64	...	6
18	(d) to (e)	Jodhpur-Bikaner... ...	448·18	471·93	736·27	763·75	824·27	5,78	5,14	9,34	9,82	10,71	14,62	12,64	12,53	14,53	16,02	43	41
7	(d) & (e)	Nilgiri and Shoranur-Cochin.	9·26	16·90	16·90	54·69	81·74	49	1,14	1,31	2,39	3,57	35	61	1,10	2,02	2,67	...	...
3	(b), (g) to (l).	Rajputana-Malwa ...	1,978·84	1,978·11	1,948·94	1,965·47	2,012·57	68,81	66,63	76,65	73,96	76,54	1,93,45	2,28,06	2,02,91	1,86,32	1,51,72	97	82
19	(a) & (b)	Rohilkund and Kumaon ...	280·77	279·75	280·05	278·30	280·09	6,23	6,39	7,83	7,93	7,66	8,99	8,50	9,08	9,76	9,83	10	8
20	(a) to (e)	South Indian	1,099·98	1,109·95	1,110·21	1,162·31	1,248·81	44,60	50,59	54,26	59,89	69,05	41,99	39,73	47,74	48,84	56,18	22	25
21	(a) to (k)	Southern Mahratta ...	1,559·74	1,594·65	1,595·09	1,646·20	1,646·20	19,85	29,03	30,93	35,21	35,84	54,24	55,89	48,58	56,26	58,18	38	29
22	(a)	Udaipur-Chitor	63·10	67·30	68·72	68·72	68·72	98	90	1,04	1,03	1,09	1,09	2,26	1,17	1,12	66	1	2
		West of India Portuguese ...	51·11	51·00	51·00	‡	‡	52	57	56	‡	‡	3,43	1,77	1,93	‡	‡	...	...
		2′6″ Gauge.																	
24	(a)	Barsi Light	21·59	21·59	21·59	21·59	21·59	21	24	28	26	22	1,32	97	1,38	1,21	1,05	...	...
25	(a)	Bukhtiarpore-Behar Light ...	...	...	...	...	9·25	...	...	...	...	26	...	...	...	...	9	...	...
28	(a)	Kalka-Simla	...	...	...	...	8·63	...	...	...	...	24	...	...	...	...	7	...	...
30	(a)	Morvi	94·36	94·36	94·36	94·36	94·36	2,45	2,42	2,52	2,23	2,24	1,67	1,74	1,01	71	69	7	7
2	(c)	Parlakimedi Light ...	...	...	...	...	24·62	...	...	...	...	14	...	...	...	...	3	...	...
19	(c)	Powayan Light	...	...	39·50	39·50	39·50	...	...	36	41	44	...	...	29	33	28	...	...
31	(a)	Ranaghat-Krishnagar Light	15·03	20·25	20·25	20·25	20·25	45	67	67	72	77	1	2	1	3	9	...	...
33	(a)	Tarakeshwar-Magra Light ...	31·12	31·12	31·12	31·12	31·12	59	67	71	72	72	6	9	11	11	13	...	...
34	(a)	Tezpur-Balipara Light ...	20·00	20·00	20·10	20·10	20·10	37	39	31	34	38	52	50	45	44	50	2	2
		2′ 0″ gauge.																	
36	(a)	Darjeeling-Himalayan ...	51·00	51·00	51·00	51·00	51·00	2,77	2,97	3,42	3,75	3,77	4,27	5,01	4,35	4,62	5,70	4	3
37	(a)	Howrah-Amta Light ...	28·62	28·62	28·69	28·69	28·69	2,40	2,41	2,39	2,43	2,52	11	15	21	22	25	...	...
38	(a)	Howrah-Sheakhala Light ...	21·75	19·75	19·75	19·75	19·75	69	71	73	74	78	4	5	6	7	9	...	...
39	(a)	Jorhat	25·95	26·46	28·46	20·00	30·25	13	12	15	22	25	83	73	67	63	68	1	...
		TOTAL ...	22,846·80	24,114·90	25,279·28	25,570·75	26,617·54	9,22,58	10,26,44	11,47,88	11,75,03	12,54,40	19,19,82	20,36,52	21,23,67	21,23,41	22,41,92	8,70	7,93

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
† Included with the Great Indian Peninsula railway.
‡ Included with the Southern Mahratta railway from 1902.
§ Excluding the Cawnpore-Burhwal metre gauge link earnings.

DIX 12.

Appendix 12.
General results.

and Appendix 44 (portion) in Report for 1902.]

each railway system.

graphs 17, 18, 22 and 25 of Report.)

IN THOUSANDS OF RUPEES.

TELEGRAPH.			SUNDRIES.					TOTAL.													Number.
								1899.			1900.			1901.			1902.			1903.			
1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	Amount.	Per mean mile worked.	Per train mile.	Amount.	Per mean mile worked.	Per train mile.	Amount.	Per mean mile worked.	Per train mile.	Amount.	Per mean mile worked.	Per train mile.	Amount.	Per mean mile worked.	Per train mile.	Main head.
									Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	
2	2	2	1,06	89	1,80	1,11	1,17	11,40	8,206	2·78	13,33	9,601	3·14	14,05	10,118	3·75	13,17	9,484	3·58	15,09	10,861	3·24	1
28	27	32	5,33	3,61	5,90	5,38	7,04	90,73	7,983	3·90	1,29,	10,776	3·91	2,30,78	8,134	3·54	1,42,66	8,854	3·31	1,55,19	9,736	3·36	2
45	45	44	3,32	64	3,13	3,92	4,58	1,82,07	26,444	6·06	1,88,92	24,315	5·81	1,70,58	21,581	6·12	1,71,20	23,104	6·32	1,83,76	23,853	6·47	3
18	16	18	4,67	4,93	5,15	5,74	5,88	90,27	33,774	4·50	96,09	35,849	4·69	94,44	35,234	4·61	1,03,83	37,870	4·77	1,02,22	36,779	4·74	4
*	*	*	66	1,56	*	*	*	42,68	5,425	2·86	59,97	7,884	3·20	*	*	*	*	*	*	*	*	*	
88	91	95	7,35	7,44	8,08	8,04	9,63	6,52,74	33,127	4·40	7,03,79	33,265	4·35	7,29,44	34,672	4·33	7,02,04	32,616	4·16	7,24,38	32,984	4·46	5
68	71	77	7,48	4,99	3,28	3,15	3,10	3,62,54	24,012	3·79	3,46,32	22,850	3·65	4,18,15	19,154	4·19	4,24,25	19,610	3·71	4,68,69	20,666	3·78	6
21	19	21	1,42	1,57	1,43	77	1,69	79,88	7,211	3·50	1,13,17	8,977	3·91	1,00,02	†	3·38	1,09,63	†	†	1,00,33	†	†	6
21	21	21	2,36	2,25	3,66	5,06	5,34	1,07,73	12,580	4·00	1,13,39	13,272	4·03	1,62,73	12,010	3·49	1,66,04	11,968	3·61	1,73,47	12,395	3·74	7
17	16	17	96	72	1,16	1,82	1,65	44,23	12,468	4·64	52,69	14,853	4·49	48,55	12,222	4·37	46,96	13,240	4·65	46,26	13,041	4·66	8
97	91	96	7,74	9,30	7,82	5,24	5,73	3,44,75	13,792	3·84	3,08,29	11,954	3·72	4,14,63	15,589	3·96	4,17,89	15,690	3·76	4,33,74	18,123	3·79	9
16	15	17	42	41	42	32	37	30,34	3,000	2·34	32,08	3,114	2·36	38,17	3,554	2·32	37,09	3,468	2·00	38,99	3,368	1·85	
33	33	36	10,62	12,65	10,73	11,85	13,01	1,11,39	10,811	3·50	1,16,76	10,716	3·43	1,34,68	11,881	3·30	1,34,18	11,686	3·13	1,43,13	11,969	3·22	10
15	15	18	31	35	65	1,37	1,51	10,20	3,917	2·65	16,98	3,897	2·84	21,14	3,651	3·23	20,79	3,528	2·74	24,09	3,678	2·82	11
34	33	37	2,72	2,36	3,12	4,08	2,85	72,02	6,805	2·54	75,06	6,602	2·45	90,79	7,206	2·67	94,83	7,410	1·83	1,11,09	8,383	2·79	12
1	2	1	3	17	35	40	43	2,60	7,144	6·64	3,34	5,500	5·69	4,72	4,499	3·78	5,12	4,482	3·79	6,42	4,892	2·97	13
14	14	17	45	44	35	31	36	22,43	4,927	3·65	23,63	5,192	3·44	19,96	4,166	3·62	16,35	3,700	3·43	19,54	4,290	3·81	14
27	25	29	1,63	1,26	1,50	1,62	2,07	87,99	9,326	2·99	1,09,91	10,194	3·22	1,18,45	10,251	3·30	1,24,71	10,550	3·33	1,35,77	10,260	3·14	15
...	...	...	...	...	...	1	...	33	6,944	2·38	35	7,286	2·27	48	10,082	3·18	30	6,213	2·04	41	8,559	2·56	16
11	9	10	30	35	32	25	28	9,22	10,853	3·91	9,67	11,371	4·27	9,99	11,287	3·91	9,10	10,284	4·24	9,76	11,529	4·49	17
15	15	16	69	92	64	72	93	61,91	9,562	3·12	72,24	10,218	3·19	70,26	9,901	3·02	74,77	10,042	3·20	79,10	10,330	3·17	4
8	10	9	...	36	1,32	1,40	75	63,	2,497	2·85	10,63	3,657	2·83	20,10	5,164	2·66	22,89	5,845	2·84	22,14	5,658	2·66	8
33	32	30	1	3	18	35	41	20,84	4,642	3·63	18,22	3,861	2·91	22,38	3,050	2·66	25,02	3,164	2·64	27,44	3,329	2·87	18
...	...	...	...	1	...	3	4	84	9,120	3·30	1,76	10,416	5·18	2,41	14,280	5·73	4,44	8,117	4·48	6,28	7,681	4·27	7
64	58	63	4,03	3,65	4,49	4,18	4,85	2,67,26	13,587	3·93	2,99,16	15,124	3·97	2,84,69	14,607	4·00	2,65,04	13,485	3·98	2,33,74	11,985	3·94	2
8	7	7	2,06	1,94	58	88	60	17,38	6,189	3·00	16,91	6,043	2·92	17,57	6,273	2·91	18,64	6,698	5·85	16,16	6,485	2·89	19
25	25	29	1,09	1,38	3,01	1,32	3,33	87,90	7,991	2·61	91,95	8,299	2·83	1,05,26	9,481	3·15	1,10,10	9,473	3·11	1,28,85	10,318	3·37	20
24	29	30	1,40	1,68	1,37	1,41	1,26	25,87	4,865	2·63	86,89	5,449	2·49	81,12	5,086	2·51	93,17	5,660	2·50	95,58	5,806	2·68	21
1	1	1	3	...	...	1	2	2,11	3,337	4·12	3,18	4,721	4·33	2,22	3,233	4·30	2,17	3,230	4·18	1,78	2,642	3·43	22
6	‡	‡	20	20	1,30	‡	‡	4,15	1,121	4·91	2,54	4,972	3·02	3,68	6,333	3·00	‡	‡	‡	‡	‡	‡	
...	...	...	3	3	2	3	3	1,56	7,231	8·73	1,24	5,764	7·26	1,68	7,792	9·50	1,50	6,960	8·17	1,30	6,053	7·88	24
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	36	3,870	2·55	25
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	32	3,708	2·31	28
4	4	4	1	...	2	7	1	4,20	4,456	2·30	4,23	4,486	1·88	3,59	3,801	2·15	3,05	3,283	2·02	2,98	3,159	2·09	30
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	676	0·91	27
...	...	...	...	...	2	2	...	...	...	...	...	...	...	67	1,693	1·16	76	1,916	1·23	72	1,818	...	19
...	...	...	...	...	1	1	...	46	3,071	1·64	69	3,422	2·28	69	3,423	2·34	76	3,722	2·49	86	4,268	2·84	31
...	...	...	1	1	1	1	...	66	2,126	0·92	77	2,461	0·99	83	2,671	0·97	84	2,708	0·97	85	2,749	1·00	33
2	2	2	4	5	6	5	5	95	4,758	2·88	96	4,799	2·95	84	4,192	2·57	85	4,250	2·55	95	4,737	2·87	34
3	3	4	7	8	8	10	11	7,15	14,019	4·34	8,09	15,866	4·29	7,88	15,453	4·19	8,50	16,672	4·57	9,62	18,856	4·03	36
...	...	...	...	...	1	...	...	2,51	3,762	3·51	2,56	3,959	3·42	2,61	3,961	3·24	2,65	3,254	3·30	2,77	3,671	3·72	37
...	...	...	...	...	...	1	...	73	3,375	2·10	76	3,849	2·25	79	3,979	2·29	82	4,153	2·39	87	4,408	2·49	38
...	1	1	...	2	1	1	2	97	3,718	3·20	87	3,276	3·21	83	2,922	2·41	87	2,988	1·80	91	3,054	1·74	39
7,49	7,32	7,84	68,51	66,25	71,31	71,06	78,92	29,19,61	12,788	3·78	31,37,14	13,007	3·73	33,44,85	13,236	3·79	33,76,87	13,188	3·65	35,33,08	13,461	3·73	

Appendix 12.
General results.

APPEN

[Appendices 13, 22 to 27

General results of working

(Referred to in para

Number.		Railway including branches worked.	GROSS EARNINGS IN THOUSANDS OF RUPEES—*concld.*											WORKING					
			Steam-Boat.					Grand Total.											
											1903.			MAINTENANCE					
														1899.				19	
Main head.	Sub-head.		1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1st half.	2nd half.	Total.	Amount.	Proportion per-cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per-cent on gross earnings.
																	Rs.	Rs.		
		5′ 6″ gauge.																		
1	(a)	Bengal Central	...	...	...	...	...	11,40	13,33	14,65	13,17	6,20	8,89	15,09	1,80	15·82	1,298	0·44	1,90	14·22
2	(a), (b) & (d)	Bengal-Nagpur	...	...	...	12	29	99,73	1,29,75	1,30,78	1,42,18	83,27	72,21	1,55,48	12,52	13·80	1,088	0·54	12,20	9·40
3	(a), (c) to (f) & (m) & (n)	Bombay, Baroda and Central India	...	...	...	...	...	1,82,07	1,88,92	1,70,58	1,71,20	1,06,53	77,23	1,83,76	21,90	12·03	3,184	0·73	27,71	14·67
4	(a)	Eastern Bengal State	25	7	...	...	...	90,53	96,16	94,44	1,03,83	38,71	63,51	1,02,22	13,72	15·16	5,134	0·68	13,28	13·80
		East Coast	74	51	*	*	*	43,42	60,48	*	*	*	*	*	6,97	16·05	886	0·47	9,02	14·91
5	(a) to (d)	East Indian	2,33	2,69	2,04	2,30	2,24	6,55,07	7,06,48	7,30,48	7,04,34	3,76,58	3,50,04	7,26,62	54,12	8·26	2,798	0·37	63,84	9·39
6	(a)	Great Indian Peninsula	...	...	...	...	...	3,62,54	3,46,32	4,18,15	4,24,25	2,81,99	1,86,70	4,68,69	40,62	11·34	2,724	0·43	29,97	8·65
	(b) to (f)	Indian Midland	...	...	...	...	...	79,88	1,13,17	1,00,02	1,09,63	59,06	41,27	1,00,33	9,63	12·06	870	0·42	10,70	9·46
7	(a) to (c)	Madras	...	...	...	...	...	1,07,73	1,13,39	1,62,73	1,66,04	90,47	83,00	1,73,47	12,03	11·17	1,403	0·45	13,99	12·34
8	(a) & (b)	Nizam's Guaranteed State	...	...	...	...	...	44,23	52,69	48,55	46,96	26,58	19,68	46,26	4,72	10·67	1,330	0·49	7,98	15·16
9	(a) to (k)	North Western State :—																		
		Commercial	18	17	10	5	3	3,44,93	3,08,46	4,14,73	4,17,94	2,37,03	2,52,74	4,89,77	37,21	10·78	1,488	0·42	34,31	11·12
		Military	34	33	...	...	...	30,68	32,41	38,17	37,09	18,70	20,29	38,99	17,09	55·71	1,689	1·32	12,45	38·40
10	(a) to (c)	Gwalior and Rohilkhand State	...	...	...	...	...	1,11,39	1,16,76	1,34,68	1,34,18	79,85	62,28	1,42,13	13,20	11·85	1,281	0·41	16,23	13·90
		3′ 3½″ gauge.																		
11	(a) & (b)	Assam-Bengal	...	12	20	17	19	16,20	17,10	21,34	20,96	10,86	13,42	24,28	4,26	26·29	1,030	0·70	4,43	25·90
12	(a) to (c)	Bengal and North-Western	5,81	5,41	6,42	6,67	8,06	77,83	80,47	97,21	1,01,50	65,93	53,22	1,19,15	10,24	13·18	967	0·36	11,05	13·73
13	(a) & (b)	Bengal Doors	13	15	15	15	16	2,73	3,49	4,87	5,27	2,52	4,06	6,58	27	9·87	742	0·69	25	7·06
14	(a) to (d)	Bhavnagar-Gondal-Junagad-Porbandar.	...	...	...	...	...	22,43	23,63	18,96	16,85	11,42	8,12	19,54	2,72	12·14	598	0·44	2,55	10·80
15	(a)	Burma	27	39	40	32	37	98,26	1,10,30	1,18,85	1,25,03	74,85	61,29	1,36,14	12,40	14·05	1,314	0·42	13,71	12·43
16	(a)	Deoghur	...	...	...	...	...	33	35	48	39	...	...	41	5	14·89	1,034	0·34	4	11·89
17	(a) & (b)	Dibru-Sadiya	...	...	...	...	...	9,22	9,67	9,99	9,10	4,63	5,13	9,76	1,53	16·64	1,806	0·56	1,73	17·88
4	(b) to (e)	Eastern-Bengal State	5,54	6,54	6,22	6,04	6,40	67,45	78,78	76,48	80,81	36,70	43,80	80,50	7,47	11·08	1,154	0·37	8,17	10·37
8	(d)	Hyderabad-Godavari Valley	...	...	...	...	...	63	10,63	20,10	22,88	13,28	8,86	22,14	...	...	...	...	2,07	19·43
18	(a) to (e)	Jodhpur-Bikaner	...	...	...	...	...	20,84	18,22	22,38	25,02	15,70	11,74	27,44	2,49	11·93	554	0·43	1,92	10·52
7	(d) & (e)	Nilgiri and Shoranur-Cochin	...	...	...	...	...	84	1,76	2,41	4,44	3,31	2,97	6,28	23	27·43	2,501	0·90	...	...
3	(b), (g) to (l)	Rajputana-Malwa	...	...	...	...	...	2,67,26	2,99,16	2,84,69	2,65,04	1,31,62	1,02,12	2,33,74	29,29	10·96	1,480	0·43	34,27	11·46
19	(a) & (b)	Rohilkund and Kumaon	...	...	...	...	...	17,33	16,91	17,57	18,64	10,32	7,84	18,16	2,28	13·13	812	0·39	1,98	11·69
20	(a) to (e)	South Indian	...	...	...	...	...	87,90	91,95	1,05,26	1,10,10	64,21	64,64	1,28,85	8,19	9·31	744	0·24	9,19	9·97
21	(d) to (h)	Southern Mahratta	...	...	...	...	...	75,87	86,89	91,12	93,17	51,11	44,47	95,58	11,92	15·71	764	0·41	13,41	15·44
22	(a)	Udaipur-Chitor	...	...	...	...	...	3,11	3,18	2,22	2,47	99	79	1,78	24	11·18	373	0·46	26	8·29
		West of India Portuguese	1,57	80	...	...	...	5,72	3,34	3,68	†	†	†	†	58	10·19	1,142	0·50	67	20·09
		2′ 6″ gauge.																		
24	(a)	Barsi Light	...	...	...	...	...	1,56	1,24	1,68	1,50	70	60	1,30	12	7·48	541	0·67	13	10·07
25	(a)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	36	36	...	...	...	...	...	...
28	(a)	Kalka-Simla	...	...	...	...	...	...	...	...	...	...	32	32	...	...	...	...	...	...
30	(a)	Morvi	...	...	...	...	...	4,20	4,23	3,59	3,05	1,55	1,43	2,98	49	11·63	519	0·27	42	10·02
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	...	8	9	17	...	...	...	...	...	...
29	(c)	Powayan Light	...	...	...	...	...	...	...	67	76	41	31	72	...	...	...	...	...	...
31	(a)	Ranaghat-Krishnagar Light	...	...	...	...	...	46	69	69	76	44	42	86	8	16·96	521	0·38	10	15·23
33	(a)	Tarakeshwar-Magra Light	...	...	...	...	...	66	77	83	84	43	42	85	9	13·09	278	0·12	9	11·98
34	(a)	Tezpur-Balipara Light	...	...	...	...	...	95	96	84	85	37	58	95	18	18·47	879	0·55	17	17·98
		2′ 0″ gauge.																		
36	(d)	Darjeeling-Himalayan	...	...	...	...	...	7,15	8,09	7,88	8,50	5,00	4,62	9,62	1,03	14·39	2,017	0·63	70	8·61
37	(d)	Howrah-Amta Light	...	...	...	...	...	2,51	2,56	2,61	2,65	1,41	1,36	2,77	40	15·84	1,388	0·56	28	10·97
38	(d)	Howrah-Sheakhala Light	...	...	...	...	...	73	76	79	92	43	44	87	12	16·60	561	0·34	12	15·47
39	(d)	Jorhat	...	...	...	...	...	97	87	83	87	40	51	91	30	31·38	1,013	1·00	49	56·32
		Total	17,17	17,18	15,53	15,82	17,74	29,36,78	31,54,32	33,60,38	33,92,69	19,13,64	16,86,77	36,00,82	3,42,50	11·86	1,499	0·44	3,61,79	11·47

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

† Included with the Southern Mahratta railway from 1902.

DIX 12—*continued.*

nd Appendix 44 (portion) in Report for 1902.]

each railway system.

graphs 17, 18, 22 and 25 of Report.)

EXPENSES IN THOUSANDS OF RUPEES.

F WAY, WORKS AND STATIONS.														LOCOMOTIVE EXPENSES.								Number.
0.		1901.				1902.				1903.				1899.				1900.				Main head.
Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	
Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.	
1,365	0·45	1,82	12·96	1,311	0·49	1,53	11·65	1,104	0·42	2,56	16·95	1,811	0·55	1,50	13·19	1,083	0·37	1,47	11·01	1,057	0·35	1
1,013	0·37	17,79	13·60	1,106	0·48	16,82	11·82	1,048	0·39	20,10	12·93	1,131	0·44	11,97	13·20	1,040	0·52	16,60	12·80	1,378	0·50	2
3,565	0·77	14,51	8·51	1,836	0·52	18,51	10·81	2,498	0·68	19,27	10·49	2,456	0·67	30,47	16·73	4,431	1·01	34,14	18·07	4,521	0·95	3
4,953	0·64	10,38	10·99	3,873	0·51	11,24	10·82	4,100	0·52	10,43	10·20	3,751	0·43	9,10	10·05	3,495	0·45	10,36	10·77	3,561	0·51	4
1,134	0·47	*	*	*	*	*	*	*	*	*	*	*	*	8,99	20·72	1,143	0·60	11,47	18·97	1,470	0·61	
3,017	0·39	65,60	8·98	3,122	0·39	71,18	10·11	3,307	0·42	57,45	7·91	2,616	0·35	63,51	9·70	3,193	0·43	73,52	10·40	3,475	0·45	5
1,977	0·31	34,54	8·26	2,204	0·35	35,04	8·26	2,237	0·32	36,46	7·78	1,608	0·29	78,27	21·63	5,248	0·83	79,85	23·06	5,268	0·84	6
849	0·36	8,49	8·49	673	0·29	9,21	8·40	721	0·25	7,85	7·84	¶	¶	16,77	21·91	1,515	0·74	20,75	18·34	1,646	0·72	6
1,637	0·49	15,91	9·78	1,173	0·34	19,10	11·50	1,376	0·42	24,81	14·30	1,773	0·54	24,05	22·32	2,508	0·89	22,91	20·21	2,682	0·82	7
2,252	0·62	3,29	7·54	926	0·33	4,56	9·71	1,286	0·40	5,11	11·09	1,441	0·51	5,43	12·29	1,532	0·57	5,65	11·10	1,649	0·49	8
1,330	0·41	40,14	9·68	1,509	0·38	53,89	12·89	2,009	0·49	54,71	11·17	2,025	0·42	69,77	20·23	2,792	0·78	69,51	22·53	2,697	0·84	9
1,208	0·92	13,97	36·59	1,305	0·85	15,22	41·04	1,410	0·81	14,73	37·78	1,272	0·70	11,31	36·85	1,117	0·87	12,19	37·60	1,183	0·90	
1,514	0·47	17,01	12·63	1,500	0·42	17,52	13·05	1,545	0·41	18,39	12·94	1,549	0·42	12,69	11·40	1,282	0·41	19,84	16·82	1,832	0·57	10
1,016	0·74	5,46	25·56	942	0·83	5,37	25·63	912	0·71	5,41	23·55	850	0·64	2,61	16·13	682	0·43	2,55	14·92	535	0·43	11
972	0·36	12,00	12·35	946	0·35	12,42	12·23	966	0·31	12,02	10·59	949	0·31	8,26	10·62	781	0·29	9,03	11·23	794	0·29	12
406	0·42	33	6·76	304	0·26	45	8·57	396	0·32	65	9·89	406	0·30	26	9·39	714	0·65	37	10·72	616	0·60	13
560	0·37	2,64	13·91	579	0·51	2,45	14·56	539	0·50	2,38	12·20	523	0·47	3,54	15·80	779	0·58	3,81	16·11	836	0·55	14
1,264	0·40	15,49	13·63	1,340	0·43	17,01	13·61	1,439	0·45	21,40	15·72	1,617	0·50	18,20	20·63	1,929	0·62	22,73	20·61	2,096	0·67	15
867	0·27	4	7·78	784	0·26	4	11·77	745	0·24	8	14·63	1,253	0·32	8	25·18	1,748	0·57	11	32·55	2,372	0·74	16
2,033	0·71	1,83	18·31	2,066	0·72	1,67	18·33	2,673	0·64	2,05	21·00	2,032	0·77	1,05	11·44	1,241	0·42	1,09	11·25	1,279	0·45	17
1,159	0·36	8,29	10·84	1,133	0·36	10,16	12·57	1,365	0·44	13,23	15·47	1,728	0·53	6,58	9·68	1,008	0·32	7,49	9·51	1,063	0·33	4
711	0·45	3,38	16·82	869	0·45	4,36	19·08	1,115	0·54	4,45	20·11	1,139	0·54	14	21·76	543	0·62	2,20	26·69	756	0·48	8
406	0·31	3,72	16·61	505	0·45	3,45	13·77	451	0·36	3,13	11·41	380	0·33	3,01	14·47	672	0·55	3,64	20·02	773	0·56	18
...	...	15	6·28	896	0·36	55	12·31	999	0·35	55	8·83	678	0·38	30	35·23	3,213	1·16	55	27·43	3,231	1·42	7
1,733	0·44	30,34	16·66	1,611	0·42	28,12	10·61	1,431	0·42	24,22	10·36	1,232	0·41	42,79	16·01	2,162	0·63	52,44	17·53	2,651	0·68	3
707	0·34	1,82	10·38	651	0·30	2,35	12·60	844	0·37	2,10	11·59	752	0·31	1,76	10·14	627	0·30	1,66	9·79	592	0·29	19
837	0·23	8,79	8·35	792	0·26	10,55	9·58	908	0·30	9,36	7·26	749	0·24	17,80	20·25	1,618	0·52	16,44	17·85	1,481	0·51	20
841	0·39	14,64	18·04	919	0·45	13,98	15·09	849	0·38	12,57	13·11	763	0·35	16,59	21·74	1,058	0·57	18,86	21·71	1,163	0·54	21
392	0·40	30	31·65	441	0·58	31	14·19	458	0·58	26	14·43	351	0·49	33	15·49	512	0·64	49	15·54	734	0·75	22
1,315	0·80	75	20·43	1,475	0·83	†	†	†	†	†	†	†	†	1,03	18·04	2,021	0·89	94	28·09	1,838	1·12	
602	1·06	11	6·74	525	0·64	11	7·66	533	0·63	11	8·53	516	0·67	18	11·48	831	1·06	13	9·97	556	1·29	24
...	...	...	...	...	...	...	...	...	...	4	10·24	397	0·26	...	...	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
449	0·19	41	11·51	438	0·25	32	10·38	336	0·21	27	9·02	285	0·19	86	20·84	928	0·48	1,20	28·41	1,276	0·53	30
...	...	...	...	...	...	...	...	...	...	6	31·49	283	0·31	...	...	...	...	...	...	...	...	2
...	...	§	§	§	§	12	16·25	311	0·20	...	...	...	...	...	...	...	...	...	...	...	...	19
543	0·37	12	16·98	580	0·39	11	14·60	517	0·35	10	11·98	511	0·34	7	14·97	460	0·33	10	15·21	494	0·33	31
289	0·12	9	11·30	302	0·11	9	10·61	290	0·10	10	12·30	337	0·12	14	20·44	435	0·20	15	19·15	462	0·19	33
850	0·52	15	17·83	753	0·46	15	17·52	745	0·45	16	17·19	814	0·49	14	14·45	687	0·42	15	15·86	750	0·45	34
1,373	0·37	1,06	13·51	2,087	0·60	1,03	12·15	2,026	0·55	1,14	11·68	2,699	0·96	1,39	19·38	2,717	0·84	1,50	18·52	2,941	0·79	36
978	0·37	31	11·89	1,080	0·38	33	12·55	1,162	0·45	31	11·30	1,093	0·42	31	12·26	1,075	0·44	37	14·46	1,293	0·49	37
608	0·35	14	18·05	719	0·42	12	15·19	630	0·36	13	15·50	683	0·39	11	14·53	490	0·31	8	13·00	405	0·24	38
2,852	1·81	12	14·09	412	0·31	23	26·72	798	0·48	26	23·42	868	0·49	19	19·33	719	0·63	17	19·22	642	0·63	39
1,500	0·43	3,55,93	10·59	1,408	0·40	3,89,67	11·49	1,522	0·42	3,88,99	10·80	1,461	0·41	4,71,44	16·05	2,064	0·61	5,26,50	16·69	2,183	0·63	

§ Information not available.
¶ Included with the Great Indian Peninsula railway.

Appendix 12.
General results.

Number.			Working expenses															
			Locomotive expenses—*concld.*												Carriage			
			1901.				1902.				1903.				1899.			
Main head.	Sub-head.	Railway including branches worked.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.
		5′ 6″ gauge.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
1	(*a*)	Bengal Central	1,61	11·49	1,163	0·43	1,45	11·00	1,043	0 39	1,92	12·74	1,383	0·41	46	4 05	332	0·11
2	(*a*) (*b*) & (*d*)	Bengal-Nagpur	19,27	14·74	1,199	0·52	22,18	15·60	1,382	0·52	24,87	15·99	1,399	0·54	2,80	3·08	243	0·12
3	(*a*), (*c*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India.	29,55	17·32	3,738	1·06	29,62	17 30	3,998	1·09	33,95	18·47	4,284	1·16	14,05	7·72	2,043	0·47
4	(*a*)	Eastern Bengal State	13,26	14·03	4,947	0·65	14,48	13·94	5,283	0·67	13,84	13·55	4,981	0·64	4,54	5·01	1,699	0·23
		East Coast	*	*	*	*	*	*	*	*	*	*	*	*	1,77	4·09	226	0·12
5	(*a*) to (*d*)	East Indian	75,67	10·36	3,602	0·45	78,04	11·08	3,625	0·46	77,08	10·61	3,510	0·47	19,39	2·96	984	0·13
6	(*a*)	Great Indian Peninsula	87,59	20·95	5,593	0·88	93,05	21·93	5,941	0·86	1,00,63	21·47	4,440	0·81	23,72	6·62	1,590	0·25
6	(*b*) to (*f*)	Indian Midland	21,20	21·19	1,681	0·72	24,38	22·24	1,870	0·66	21,79	21·72	†	†	4,40	5·51	397	0·19
7	(*a*) to (*c*)	Madras	35,32	21·71	2,605	0·75	36,99	22·28	2,667	0·80	37,02	21·69	2,688	0·81	4,60	4·27	525	0 17
8	(*a*) & (*b*)	Nizam's Guaranteed State	5,14	11·80	1,448	0·52	6,71	14·29	1,892	0·61	6,67	14·41	1,880	0·67	1,15	2·59	323	0·12
9	(*a*) to (*k*)	North Western State :—																
		Commercial	80,93	19·51	3,043	0·77	81,10	19·40	3,023	0·73	95,26	19·45	3,525	0·74	15,32	4·44	613	0·17
		Military	13,65	35·77	1,275	0·84	13,93	37·50	1,307	0·75	15,50	39·75	1,338	0·73	1,63	5 30	161	0·13
10	(*a*) to (*c*)	Oudh and Rohilkhand State	19,87	14·75	1,753	0·49	19,96	14·87	1,761	0·47	21,48	15·11	1,809	0·49	8,14	7·31	790	0·27
		3′ 3½″ gauge.																
11	(*a*) & (*b*)	Assam-Bengal	3,15	14·76	544	0·48	3,87	18·48	657	0·51	4,18	7·43	657	0·50	52	3·20	125	0·08
12	(*a*) to (*c*)	Bengal and North-Western	9,86	10·15	783	0·29	11,20	11·03	875	0·29	12,02	10·03	905	0·30	1,93	2·43	182	0·07
13	(*a*) & (*b*)	Bengal Dooars	75	15 32	690	0·64	63	12·02	555	0·46	73	11·11	556	0·34	7	2·42	192	0·17
14	(*a*) to (*d*)	Bhavnagar-Gondal-Junagad-Porbandar.	3,16	16·63	695	0·61	2,78	16·53	612	0·57	2,70	13·82	593	0·53	66	2·95	146	0·11
15	(*a*)	Burma	26,43	22·24	2,287	0·74	27,16	21·72	2,293	0·72	30,27	22·23	2,287	0·70	4,15	4·71	440	0·14
16	(*a*)	Deoghur	16	32·56	3,283	1·04	10	33·53	2,123	0·68	8	19·51	1,670	0·50	5	15·34	1,065	0·35
17	(*a*) & (*b*)	Dibru-Sadiya	1,28	12·35	1,395	0·48	1·32	14·52	1,597	0·62	1,12	11·48	1,360	0·52	49	5·35	581	0·19
4	(*b*) to (*e*)	Eastern Bengal State	9,09	11·89	1,243	0·39	8,76	10·84	1,177	0 38	9,76	11·41	1,274	0·39	1,97	2·92	304	0·10
8	(*c*)	Hyderabad-Godavari-Valley	3,12	15·54	802	0·41	3,54	15·47	904	0·44	3,36	15·17	858	0·40	1	1·16	29	0·03
18	(*a*) to (*c*)	Jodhpur-Bikaner	4,71	21·03	681	0·61	5,24	20·95	686	0·55	5,88	21·41	713	0·61	35	1·68	78	0·06
7	(*d*) & (*e*)	Nilgiri and Shoranur-Cochin	66	27·41	3,915	1·57	1,24	28·02	2,274	1·26	1,59	25·39	1,950	1·08	2	2·57	235	0·08
3	(*b*), (*g*) to (*l*)	Rajputana-Malwa	49,39	17·35	2,624	0·69	45,76	17·27	2,328	0·69	42,26	18·08	2,149	0·71	9,96	3·73	504	0·15
19	(*a*) & (*b*)	Rohilkund and Kumaon	1,97	11·23	705	0·33	2,28	12 23	819	0·36	2,16	11·90	771	0·35	62	3·57	221	0·11
20	(*a*) to (*e*)	South Indian	19,08	18·13	1,719	0·57	17,88	16·24	1,539	0·50	20,45	15·87	1,638	0·54	4,88	5·55	444	0·14
21	(*a*) to (*h*)	Southern Mahratta	17,91	22·07	1,123	0·55	21,21	22·77	1,288	0·58	20,54	21·43	1,248	0·58	4,82	6·35	309	0·17
22	(*a*)	Udaipur-Chitor	39	17·74	572	0·76	34	15·68	507	0·65	39	21·79	576	0·75	11	5·08	169	0·21
		West of India Portuguese	99	26·86	1,939	1·09	‡	‡	‡	‡	‡	‡	‡	‡	19	3·35	375	0·17
		2′ 6″ gauge.																
24	(*a*)	Barsi Light	17	10·23	801	0·98	16	10·95	762	0·89	16	12·48	755	0·98	5	3·34	242	0·28
25	(*a*)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	4	11·87	460	0·30	...	...	...	...
28	(*a*)	Kalka-Simla	...	...	...	...	...	...	...	...	13	39·39	1,506	0·91	...	...	...	...
30	(*a*)	Morvi	1,00	27·81	1,057	0·60	78	25·67	830	0·52	63	21·17	669	0·44	17	4·07	182	0·09
2	(*c*)	Parlakimedi Light	...	...	...	...	...	...	...	...	9	53·59	362	0·49	...	...	...	...
19	(*c*)	Powayan Light	§	§	§	§	15	20·05	384	0 25	...	...	...	...	...	...	...	...
31	(*a*)	Ranaghat-Krishnagar Light	11	16·28	556	0·38	12	16·23	611	0·40	10	11·85	506	0·34	2	4·53	139	0·10
33	(*a*)	Tarakeshwar-Magra Light	14	16·57	443	0·16	15	17·78	482	0·17	14	16·05	440	0·16	4	5·43	116	0·06
34	(*a*)	Tezpur-Balipara Light	15	17·83	753	0·46	14	16·85	718	0·43	15	15·38	728	0·44	7	8·00	381	0·21
		2′ 0″ gauge.																
36	(*a*)	Darjeeling-Himalayan	1,45	18·46	2,853	0·83	1,45	17·02	2,838	0·77	1,72	17·90	3,377	1·22	51	7·14	1,001	0·31
37	(*a*)	Howrah-Amta Light	46	17·54	1,593	0·57	33	12·29	1,138	0·44	36	12·90	1,248	0·48	10	3·84	370	0·14
38	(*a*)	Howrah-Sheakhala Light	13	16·33	650	0·37	10	12·40	515	0·30	9	9·77	431	0·24	3	4·26	144	0·08
39	(*a*)	Jorhrat	41	49·29	1,141	1·19	27	31·41	938	0·56	24	26·68	815	0 46	22	22·43	834	0·73
		Total	5,59,13	16·64	2,214	0·63	5,78,85	17·06	2,261	0·62	6,11,95	16·99	2,299	0·64	1,33,98	4·56	587	0·17

* Transferred partly to the Bengal-Nagpur railway
†Included with the
‡ Included with the Southern
§ Information not

DIX 12—*continued.*

and Appendix 44 (portion) in Report for 1902.]

each railway system.

graphs 17, 18 22 and 25 of Report.)

IN THOUSANDS OF RUPEES—*continued.*

AND WAGON EXPENSES.														TRAFFIC EXPENSES.								Number
1900.				1901.				1902.				1903.			1899.				1900.			
Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	† Main head.
		Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.	
29	2·14	205	0·07	34	2·42	245	0·09	48	3·63	345	0·13	72	4·74	515	0·15	1,81	11·48	942	0·32	1,50	11·29	1,084	0·35	1
3,58	2·76	297	0·11	5,49	4·20	341	0·15	5,14	3·61	320	0·12	5,85	3·76	329	0·13	7,26	8·01	631	0·31	8,93	6·88	742	0·27	2
15,31	8·10	1,970	0·43	10,00	5·86	1,284	0·36	13,90	8·12	1,875	0·51	13,04	7·10	1,676	0·45	10,36	5·96	1,579	0·36	12,19	6·45	1,568	0·34	3
4,64	4·83	1,733	0·22	6,15	6·51	2,206	0·30	3,85	3·68	1,395	0·18	6,43	6·29	2,313	0·30	10,64	11·07	4,056	0·54	11,12	11·57	4,150	0·55	4
1,93	3·19	250	0·10	*	*	*	*	*	*	*	*	*	*	*	*	5,27	12·14	670	0·35	5,76	9·53	737	0·30	
21,40	3·22	1,012	0·13	22,20	3·04	1,057	0·13	17,30	2·53	827	0·11	14,93	2·06	680	0·09	41,53	6·34	2,108	0·28	45,61	6·46	2,155	0·28	4
18,07	5·22	1,192	0·19	20,49	4·90	1,308	0·21	22,71	5·35	1,450	0·21	24,77	5·29	1,093	0·20	30,76	8·59	2,063	0·32	32,25	9·31	2,128	0·34	4
4,13	3·65	327	0·14	4,89	4·89	383	0·17	,84	5·33	407	0·17	5,24	5·22	†	†	6,07	7·60	548	0·26	6,90	8·19	555	0·24	4
4,89	4·30	571	0·17	7,00	4·30	516	0·15	8,51	5·13	614	0·19	10,59	6·10	757	0·23	8,67	8·05	1,012	0·32	8,87	7·82	1,038	0·31	2
1,33	2·52	375	0·09	1,82	3·63	372	0·13	1,43	3·05	404	0·10	1,57	3·39	443	0·16	2,74	6·21	774	0·29	2,81	5·32	791	0·24	4
14,14	4·58	549	0·17	21,71	5·24	816	0·21	36,42	8·72	1,358	0·33	16,60	3·39	614	0·13	26,46	7·67	1,059	0·30	25,26	8·51	1,018	0·32	1
1,76	5·43	171	0·13	2,25	5·90	209	0·14	3,73	10·05	355	0·21	2,05	5·26	177	0·10	4,56	14·85	451	0·35	4,69	14·48	456	0·35	
6,85	5·86	638	0·20	4,66	3·46	411	0·11	10,23	7·65	905	0·24	5,71	4·02	481	0·13	9,13	6·19	886	0·29	10,16	6·71	948	0·30	1
62	3·60	141	0·10	92	4·33	159	0·14	1,02	4·86	173	0·13	1,22	5·11	193	0·15	2,08	12·82	502	0·34	2,02	13·58	533	0·39	1
2,58	3·21	227	0·08	2,63	2·70	209	0·08	2,56	2·52	200	0·06	2,75	2·31	208	0·07	5,63	7·21	532	0·20	6,77	8·42	596	0·22	4
7	2·05	118	0·12	17	3·56	160	0·14	16	2·98	137	0·11	19	2·82	145	0·09	31	11·19	852	0·76	36	10·11	581	0·60	1
73	3·08	160	0·11	72	3·30	158	0·14	48	2·84	105	0·10	56	2·89	124	0·11	2,16	9·62	474	0·35	2,25	9·51	494	0·33	1
5,40	4·89	498	0·16	6,10	5·13	528	0·17	6,09	4·87	515	0·16	6,26	4·59	473	0·14	9,14	10·35	969	0·31	10,22	9·27	942	0·30	1
4	10·61	774	0·24	1	2·10	213	0·07	1	2·34	211	0·07	4	3·76	335	0·25	5	16·31	1,133	0·37	6	15·96	1,164	0·36	1
53	5·46	621	0·22	51	5·11	577	0·20	49	5·40	594	0·23	57	5·84	693	0·26	57	6·20	673	0·23	62	6·44	733	0·26	1
2,79	3·53	395	0·12	3,43	4·49	470	0·15	3,38	4·18	454	0·14	2,86	3·35	374	0·11	6,09	9·03	940	0·30	6,63	8·41	940	0·29	
15	1·39	51	0·03	34	1·68	87	0·04	38	1·64	96	0·04	43	1·95	111	0·05	8	11·91	297	0·34	1,09	10·23	376	0·24	1
45	2·48	93	0·07	53	2·35	76	0·07	90	3·61	118	0·10	68	2·49	88	0·07	88	4·09	195	0·15	1,01	5·53	214	0·16	1
3	1·75	207	0·09	3	1·37	195	0·08	16	3·72	392	0·17	29	4·58	352	0·19	4	5·23	476	0·17	10	4·86	572	0·25	1
15,08	5·04	763	0·20	16,76	5·69	891	0·23	17,56	6·62	893	0·23	16,53	7·07	841	0·28	17,23	6·45	876	0·25	18,84	6·30	953	0·24	1
65	3·85	233	0·11	78	4·41	277	0·13	73	3·94	264	0·12	74	4·10	266	0·12	1,33	7·65	474	0·23	1,33	7·89	477	0·23	1
5,17	5·62	466	0·16	5,41	5·14	487	0·16	5,65	5·13	486	0·16	4,73	3·67	379	0·12	7,85	8·93	714	0·23	7,85	8·52	707	0·24	2
5,28	6·07	331	0·15	5,66	6·97	355	0·18	5,60	6·01	340	0·15	6,14	6·40	373	0·17	8,43	11·11	546	0·29	9,21	10·60	577	0·28	2
4	1·32	62	0·06	15	6·67	216	0·23	15	6·77	219	0·23	11	6·52	172	0·23	18	8·48	283	0·35	21	6·76	319	0·33	2
21	6·39	41	0·25	21	5·69	411	0·23	‡	‡	‡	‡	‡	‡	‡	‡	58	10·07	1,128	0·49	57	17·24	1,127	0·69	
3	2·50	139	0·35	3	1·34	143	0·17	3	2·25	157	0·18	3	2·20	134	0·17	17	10·62	768	0·34	15	12·69	695	1·35	2
...	...	...	...	...	...	...	...	...	...	...	...	1	1·36	53	0·03	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	1	3·13	116	0·07	...	...	...	...	...	...	...	...	2
17	4·03	180	0·08	16	4·53	172	0·10	14	4·62	149	0·09	10	3·56	113	0·08	42	10·02	447	0·23	47	11·16	501	0·21	3
...	...	...	...	...	...	...	...	...	...	...	...	3	11·03	74	0·19	...	...	...	...	...	...	...	...	
...	...	...	...	§	§	§	§	4	5·61	107	0·07	...	...	...	...	...	...	...	...	...	...	...	...	1
4	3·65	247	0·17	3	4·79	163	0·11	3	3·72	140	0·09	2	2·82	120	0·08	16	34·63	1,064	0·76	19	28·22	988	0·67	3
3	4·26	96	0·04	5	6·25	167	0·06	6	6·69	181	0·06	6	6·96	191	0·07	16	24·18	674	0·22	16	23·34	514	0·21	3
7	7·36	350	0·21	5	5·44	228	0·12	6	7·03	299	0·18	5	5·26	249	0·15	16	16·46	783	0·48	16	16·99	800	0·48	3
65	8·09	1,275	0·35	54	6·95	1,064	0·31	44	5·16	861	0·23	49	5·10	984	0·34	68	9·45	1,325	0·41	69	8·56	1,353	0·30	3
9	3·54	314	0·12	9	3·64	331	0·12	9	3·30	304	0·13	11	4·09	396	0·15	45	17·39	1,567	0·62	47	18·34	1,642	0·63	3
2	2·90	101	0·06	3	3·47	138	0·08	2	2·90	121	0·07	3	3·55	156	0·09	20	27·94	942	0·56	20	26·13	1,013	0·59	3
6	7·37	227	0·22	6	7·30	214	0·18	10	11·85	354	0·21	—3	—3·84	—117	—0·07	19	19·52	725	0·63	19	21·95	718	0·70	3
1,39,31	4·42	578	0·17	1,51,90	4·52	601	0·17	1,76,38	5·20	689	0·19	1,52,51	4·24	573	0·16	2,30,68	7·85	1,010	0·30	2,40,27	7·90	1,034	0·30	

and partly to the Madras railway from the 1st January 1901.
Great Indian Peninsula railway.
Mahratta railway from 1902.
available.

Appendix 12.
General results.

APPEN
[Appendices 13, 22 to 27
General results of working
(Referred to in para

Number.		Railway including branches worked.	WORKING EXPENSES IN															
			Traffic Expenses—*concld.*										General					
			1901.				1902.				1903.				1899.				1900.	
Main head.	Sub-head.		Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent on gross earnings.
		5′ 6″ gauge.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.		
1	(a)	Bengal Central	1,46	9·99	1,011	0·37	1,52	11·51	1,992	0·41	1,57	10·43	1,132	0·34	1,44	12·66	1,039	0·35	1,48	11·12
2	(a), (b) & (d).	Bengal-Nagpur	12,26	9·38	763	0·33	12,98	9·13	809	0·30	14,41	9·27	811	0·31	7,34	8·09	638	0·31	8,04	6·20
3	(a) (c) to (f) & (m) & (n).	Bombay, Baroda and Central India.	11,35	6·65	1,436	0·41	11,64	6·89	1,571	0·43	13,90	7·56	1,799	0·49	5,60	3·08	814	0·19	5,89	·07
4	(a)	Eastern Bengal State	11,63	12·30	4,336	0·57	12,81	12·34	4,674	0·59	13,45	13·16	4,839	0·62	3,87	4·28	1,448	0·19	3,89	4·05
		East Coast	*	*	*	*	*	*	*	*	*	*	*	*	3,97	9·15	505	0·26	4,13	6·83
5	(a) to (d)	East Indian	49,65	6·79	2,363	0·29	50,92	7·23	2,366	0·30	53,97	7·43	2,458	0·33	20,54	3·14	1,044	0·14	22,20	3·14
6	(a)	Great Indian Peninsula	31,30	7·48	1,998	0·31	33,61	7·92	2,146	0·31	37,17	7·93	1,640	0 30	13,09	3·36	878	0·14	14,27	4·12
6	(b) to (f)	Indian Midland	7,61	7·61	604	0·26	8,84	8·07	692	0·24	8,04	8·01	¶	¶	5,57	6·97	503	0·24	5,92	5·28
7	(a) to (c)	Madras	14,31	8·18	982	0·29	12,99	7·82	936	0·28	14,10	8·13	1,008	0·30	5,90	5·48	690	0 22	6,18	5·46
8	(a) & (b)	Nizam's Guaranteed State	2,70	6·20	761	0·27	2,67	5·69	754	0·21	2,60	5·62	733	0·26	2,70	6·10	761	0·28	2,59	4·90
9	(a) to (h)	North Western State:—																		
		Commercial	29,89	7·21	1,124	0·29	32,07	7·67	1,196	0·20	34,20	6 98	1,266	0·26	11,99	3·47	490	0 13	12,35	4·00
		Military	5,13	13·42	479	0·31	5,08	13·71	471	0·27	5,45	13·98	471	0·26	2,61	8·50	258	0·20	2,87	*
10	(a) to (c)	Oudh and Rohilkhand State	11,79	8·75	1,040	0·29	12,29	9·16	1,084	0·29	13,49	9·49	1,136	0·31	4,71	4·23	457	0·15	5,06	4·3
		3′ 3⅜″ gauge.																		
11	(a) & (b)	Assam-Bengal	2,93	13·73	506	0·45	2,98	14·24	506	0·39	3,11	12·96	489	0·37	3,32	20·48	802	0·54	3,10	18·14
12	(a) to (c)	Bengal and North-Western	8,23	8·47	653	0·24	8,60	8·28	679	0·22	8,91	7·48	671	0·22	4,56	5·85	430	0·16	5,10	6·30
13	(a) & (b)	Bengal Duars	45	9·15	412	0·36	42	7·98	368	0·30	49	7·44	373	0·23	25	9·03	697	0·63	24	7·05
14	(a) to (d)	Bhavnagar-Gondal-Junagad-Porbandar.	1,88	9·93	413	0·36	1,93	11·46	424	0·40	1,85	9·45	406	0·37	2,09	9·33	460	0·34	2,03	8·61
15	(a)	Burma	11,11	9·35	962	0·31	11,30	9·04	956	0·30	13,05	9·59	986	0·30	6,86	7·77	727	0·23	6,86	6·22
16	(a)	Deoghar	6	13·25	1,336	0·42	6	20·56	1,302	0·42	8	19·51	1,670	0·50	2	7·07	491	0·16	2	6·74
17	(a) & (b)	Dibru-Sadiya	70	6·98	787	0·27	65	7·11	781	0·30	65	6·66	791	0·30	81	8·73	948	0·33	83	8·59
4	(b) to (e)	Eastern Bengal State	7,02	9·18	960	0·30	6,62	8·19	889	0·28	7,77	9·08	1,015	0·31	2,89	4·29	446	0·14	3,20	4·07
8	(c)	Hyderabad-Godavari Valley	1,84	9·13	472	0·24	2,10	9·16	536	0·26	2,20	9·93	562	0·26	4	6·98	174	0·20	85	8·05
18	(a) to (c)	Jodhpur-Bikaner	1,27	5·69	184	0·16	1,64	6·67	215	0·18	1,58	5·76	192	0·16	57	2·74	127	0·10	59	3·28
7	(d) & (e)	Nilgiri and Shoranur-Cochin	71	4·43	632	0·25	33	7·42	603	0·33	60	9·52	731	0 41	2	1·82	166	0·06	4	1·92
3	(b), (g) to (l).	Rajputana-Malwa	19,03	6·69	1,011	0·27	17,07	6·78	914	0·27	17,76	7·60	903	0·30	12,31	4·61	622	0·18	10,55	3·77
19	(a) & (b)	Rohilkund and Kumaon	1,47	8·35	524	0·24	1,57	8·43	565	0·25	1,48	8·14	528	0·24	1,51	8·67	537	0·26	1,48	8·76
20	(a) to (e)	South Indian	7,59	7·22	684	0·23	7,09	7·26	688	0·23	8,43	6·55	675	0·22	6,30	7·16	572	0·19	6,68	7·25
21	(a) to (h)	Southern Mahratta	8,95	11·03	561	0·28	9,25	9·94	562	0 25	8,95	9·34	544	0·25	8,15	10·74	523	0·28	7,99	9·20
22	(a)	Udaipur-Chittor	20	9·06	293	0·39	20	9·23	298	0·38	18	10·29	272	0·35	13	6·37	212	0·26	18	5·54
		West of India Portuguese	57	15·49	1,118	0·63	†	†	†	‡	†	†	†	†	96	16·72	1,872	0·82	96	28·73
		2′ 6″ gauge.																		
24	(a)	Barsi Light	17	10·96	784	0·96	16	10·89	758	0·89	14	10·59	641	0·83	38	24·59	1,778	2·11	37	29·63
25	(a)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	9	25·56	989	0·65	...	...	...	...	...	...
28	(a)	Kalka-Simla	...	...	...	...	...	...	...	...	6	19·37	695	0·45	...	...	...	...	...	...
30	(a)	Morvi	38	10·66	405	0·23	32	10·58	342	0·21	30	9·98	315	0·21	45	10·60	473	0·25	33	7·71
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	5	29·65	200	0·27	...	...	...	...	...	...
19	(c)	Powayan Light	‡	‡	‡	‡	9	12·28	235	0·15	...	...	...	..	‡	‡	‡	‡	‡	‡
31	(a)	Ranaghat Krishnagar Light	21	30·05	1,025	0·70	22	28·93	1,088	0·72	23	26·32	1,123	0·74	5	10·75	330	0·24	7	9·62
33	(a)	Tarakeshwar-Magra Light	16	19·39	518	0·19	16	19·32	524	0·18	16	18·93	519	0·19	11	18·18	367	0·17	12	15·66
34	(a)	Tezpur-Balipara Light	17	19·77	828	0·50	16	18·40	782	0·47	16	17·40	825	0·50	13	13·86	660	0·39	13	13·83
		2′ 0″ gauge.																		
36	(a)	Darjeeling-Himalayan	61	7·70	1,190	0·35	69	8·17	1,363	0·37	73	7·54	1,423	0·51	82	11·47	1,608	0·50	73	9·04
37	(a)	Howrah-Amta Light	44	16·93	1,538	0·55	42	15·86	1,468	0·57	45	16·40	1,586	0·61	12	5·17	454	0·18	12	4·67
38	(a	Howrah-Sheakhala Light	20	25·28	1,006	0·58	19	23·40	972	0 56	21	23·62	1,041	0·59	6	7·44	251	0·14	5	7·20
39	(a)	Jorhat	16	15·10	559	0·46	17	19·81	592	0·36	17	19·15	595	0·33	12	12·54	466	0·40	11	12·35
		Total	2,63,92	7 85	1,043	0·30	2,73,70	8·07	1,069	0·30	2,92,19	8·11	1,068	0·30	1,42,38	4·85	623	0·18	1,47,43	4·67

* Transferred partly to the Bengal-Nagpur railway
† Included with the
‡ Information
¶ Included with

DIX 12—*continued.*

Appendix 12.
General results.

and Appendix 21 (portion) in Report for 1902.]

each railway system.

graphs 17, 18, 22 and 25 of Report.)

THOUSANDS OF RUPEES—*continued.*

1901.						1902.				1903.				Steam-boat service.					Special and Miscellaneous expenditure.					Number.
Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.	Per train mile.	1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	Main head.
Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.											
1,634	0·34	1,57	11·16	1,129	0·42	1,63	12·37	1,173	0·44	1,65	10·93	1,187	0·35	...	...	...	...	...	47	1,19	88	82	1,59	1
608	0·24	9,78	7·48	608	0·26	10,49	7·38	654	0·25	11,67	7·51	657	0·25	...	...	...	72	1,42	1,63	3,27	4,70	4,47	6,70	2
868	0·16	6,86	4·02	868	0·25	7,41	4·33	1,000	0·27	8,33	4·53	1,079	0·29	...	...	...	...	...	2,88	5,44	3,62	2,75	3,24	3
1,450	0·19	3,75	4·39	1,547	0·20	4,46	4·29	1,626	0·20	4,37	4·27	1,573	0·20	47	35	...	...	...	2,09	2,28	2,51	3,21	2,87	4
688	0·22	*	*	*	*	*	*	*	*	*	*	*	*	59	53	*	*	*	71	1,09	*	*	*	
1,040	0·14	23,53	3·22	1,120	0·14	24,20	3·44	1,125	0·14	24,38	3·36	1,110	0·15	1,80	2,16	2,02	1,80	2,01	16,88	16,96	18,94	14,86	16,41	5
942	0·15	17,19	4·11	1,097	0·17	16,92	3·99	1,080	0·16	17,73	3·78	783	0·14	...	...	...	...	...	8,93	10,76	9,74	11,54	13,73	6
476	0·51	4,14	4·14	329	0·14	4,42	4·03	347	0·12	3,84	3·80	¶	¶	...	...	...	...	...	2,97	5,03	2,65	2,98	2,92	6
734	0·22	8,44	5·18	622	0·18	9,27	5·59	668	0·20	9,42	5·43	673	0·20	...	...	...	...	...	1,19	2,18	3,66	4,23	4,96	7
728	0·31	2,53	5·81	714	0·25	2,28	4·85	643	0·20	2,31	4·99	651	0·23	...	...	...	...	...	62	1,32	52	1,08	1,07	8
479	0·15	13,04	3·15	490	0·12	13,21	3·16	493	0·12	13,88	2·83	514	0·11	27	16	21	15	14	5,01	5,12	5,43	7,15	5,82	9
279	0·21	2,89	7·57	270	0·18	3,12	8·42	284	0·16	3,19	8·18	275	0·15	20	35	16	12	10	47	57	56	77	69	10
472	0·15	5,40	4·01	476	0·13	5,81	4·33	513	0·14	6,23	4·38	524	0·14	...	...	...	...	...	2,75	2,10	2,69	2,97	3,19	11
712	0·52	3,71	20·22	641	0·57	4,21	20·10	715	0·56	4,18	17·42	657	0·50	1	12	15	14	19	17	32	46	83	1,29	12
446	0·17	5,57	5·73	442	0·16	5,72	5·63	447	0·14	6,04	5·07	456	0·14	2,43	2,78	2,21	3,01	3,43	3,27	2,27	2,84	3,41	2,73	13
406	0·42	55	11·24	506	0·44	83	15·63	731	0·60	96	14·64	731	0·44	37	23	13	11	9	2	3	4	9	17	14
447	0·30	2,03	10·73	447	0·39	2,00	11·85	438	0·41	1,94	9·04	426	0·38	...	...	...	...	...	47	51	43	38	39	15
632	0·20	7,49	6·30	648	0·21	7,95	6·36	673	0·21	9,06	6·65	685	0·21	71	98	83	1,24	1,98	1,01	1,45	1,51	1,55	1,95	16
491	0·17	3	5·75	579	0·18	3	9·34	668	0·22	3	7·32	626	0·19	...	...	...	...	...	2	1	...	...	1	17
977	0·34	82	8·20	926	0·32	81	8·89	1,022	0·39	82	8·40	1,027	0·39	...	...	...	...	...	6	6	5	4	5	4
455	0·14	3,40	4·45	465	0·15	3,45	4·27	464	0·15	3,51	4·11	459	0·14	3,84	4,80	4,61	5,91	5,85	1,05	1,31	1,17	1,65	1,30	8
294	0·19	1,97	9·83	507	0·26	2,49	10·87	636	0·31	2,48	11·21	634	0·30	...	...	...	...	...	...	6	22	33	36	18
127	0·09	92	4·13	134	0·12	1,14	4·57	150	0·12	1,25	4·54	151	0·13	...	...	...	...	...	81	48	1,29	69	72	7
226	0·10	4	1·57	225	0·09	19	4·37	355	0·19	38	5·99	460	0·26	...	...	...	...	...	3	3	4	12	15	3
570	0·14	11,47	4·03	610	0·16	11,38	4·29	579	0·17	10,65	4·55	542	0·18	...	...	...	...	...	2,90	3,63	4,58	5,00	4,69	
529	0·26	1,67	9·51	597	0·27	1,59	8·52	571	0·25	1,71	9·42	611	0·27	...	...	...	...	...	1,19	1,05	18	24	28	19
601	0·20	6,79	6·45	612	0·20	7,10	6·45	611	0·20	7,39	5·73	591	0·19	...	...	...	...	...	1,93	1,33	1,63	1,80	1,45	20
501	0·23	8,46	10·43	530	0·26	9,05	9·71	550	0·25	9,15	9·55	556	0·26	...	...	...	...	...	1,61	1,54	1,53	1,56	1,61	21
262	0·27	17	7·78	252	0·34	16	7·26	235	0·30	14	8·07	213	0·27	...	...	...	...	...	7	14	7	4	3	22
1,879	1·14	98	26·73	1,929	1·09	†	†	†	†	†	†	†	†	63	58	56	†	†	11	7	11	†	†	
1,714	3·18	38	22·74	1,772	2·16	43	28·57	1,988	2·33	30	23·12	1,400	1·82	...	...	...	...	...	1	2	3	8	3	24
...	...	...	...	...	...	...	...	...	...	3	8·29	321	0·21	...	...	...	...	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	5	15·82	579	0·37	...	...	...	...	...	...	...	...	...	...	28
346	0·15	34	9·50	361	0·20	32	10·63	344	0·22	23	7·70	243	0·16	...	...	...	...	...	9	5	4	4	...	30
...	...	...	...	...	...	...	...	...	...	4	23·18	157	0·21	...	...	...	...	...	...	...	...	...	...	2
‡	‡	‡	‡	‡	‡	11	14·35	275	0·18	...	...	...	...	‡	‡	‡	...	...	‡	‡	‡	2	...	19
346	0·23	7	9·71	331	0·22	7	8·81	331	0·22	7	7·57	323	0·21	...	...	...	...	...	...	...	...	...	1	31
385	0·15	13	15·82	423	0·15	13	15·18	411	0·14	13	15·42	423	0·16	...	...	...	...	...	...	1	1	...	1	33
650	0·39	15	17·53	733	0·45	12	14·73	625	0·37	15	15·49	734	0·45	...	...	...	...	...	1	2	1	...	...	34
1,431	0·31	86	10·87	1,679	0·49	88	10·35	1,726	0·47	90	9·39	1,771	0·64	...	...	...	...	...	15	20	22	23	47	36
419	0·16	15	5·87	533	0·19	14	5·46	505	0·20	14	5·23	505	0·19	...	...	...	...	...	...	...	1	1	2	37
253	0·15	5	7·10	283	0·16	6	7·06	293	0·17	6	7·23	318	0·18	...	...	...	...	...	...	2	...	1	...	38
416	0·41	12	14·48	423	0·35	12	13·86	414	0·25	12	13·64	416	0·24	...	...	...	...	...	...	...	...	1	1	39
611	0·18	1,57,85	4·70	625	0·18	1,63,70	4·83	639	0·18	1,68,91	4·69	635	0·18	10,82	13,04	10,88	13,20	15,21	61,56	71,97	72,37	74,99	80,90	

and partly to the Madras railway from the 1st January 1901.
Southern Mahratta railway from 1902.
not available.
the Great Indian Peninsula railway.

Appendix 12.
General results.

[Appendices 13, 23 to 27

General results of working

(Referred to in para

Number. Main head.	Sub-head.	Railway including branches worked.	WORKING EXPENSES IN TOTAL WORKING 1899. Amount.	1899. Proportion per cent on gross earnings.	1899. Per mean mile worked.*	1899. Per train mile.*	1900. Amount.	1900. Proportion per cent. on gross earnings.	1900. Per mean mile worked.*	1900. Per train mile.*	1901. Amount.	1901. Proportion per cent. on gross earnings.	1901. Per mean mile worked.*	1901. Per train mile.*
					Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
		5′ 6″ gauge.												
1	(a)	Bengal Central	6,98	61·23	5,025	1·20	7,83	58·70	5,635	1·84	7,62	54·25	5,489	2·03
2	(c), (b) & (d).	Bengal-Nagpur	43,52	47·96	3,781	1·87	52,62	40·56	4,370	1·68	69,29	52·98	4,309	1·86
3	(a) (c) to (f) & (m) & (n).	Bombay, Baroda and Central India.	85,76	46·59	12,470	2·96	1,00,59	53·58	13,193	2·85	75,91	44·50	9,604	2·73
4	(a)	Eastern Bengal State.	44,63	49·30	16,700	2·20	45,92	47·75	17,002	2·22	48,07	50·89	17,933	2·35
		East Coast	28,27	66·11	3,518	1·85	33,93	56·10	4,291	1·77	†	†	†	†
5	(a) to (d)	East Indian	2,17,77	32·18	11,032	1·46	2,45,69	34·78	11,511	1·50	2,57,61	35·27	12,165	1·52
6	(a)	Great Indian Peninsula	1,95,39	54·56	13,102	2·11	1,85,17	52·47	12,218	1·95	2,00,85	48·03	12,820	2·01
6	(b) to (f)	Indian Midland	45,41	56·85	4,102	1·98	53,52	47·26	4,246	1·86	43,98	48·97	3,885	1·65
7	(a) to (c)	Madras	56,44	52·39	6,591	2·09	59,02	52·04	6,907	2·10	83,64	51·40	6,169	1·80
8	(a) & (b)	Nizam's Guaranteed State	17,36	39·23	5,417	2·01	21,88	41·52	6,167	1·74	15,50	35·59	4,370	1·56
9	(a) to (k)	North Western State—												
		Commercial	1,66,03	48·14	6,632	1·85	1,61,85	52·47	6,279	1·95	1,91,35	46·14	7,186	1·82
		Military	37,87	123·42	3,722	2·92	34,88	107·60	3,385	2·57	38,61	101·15	3,591	2·35
10	(a) to (c)	Oudh and Rohilkhand State	50,62	45·45	4,913	1·61	60,04	51·42	5,599	1·75	61,42	45·60	5,418	1·51
		3′ 3½″ gauge.												
11	(a) & (b)	Assam-Bengal	12,97	90·08	5,135	2·12	13,46	78·69	3,060	2·23	16,78	78·60	2,870	2·54
12	(a) to (c)	Bengal and North-Western	38,32	46·67	3,201	1·19	39,58	49·21	3,235	1·20	43,34	44·59	3,196	1·18
13	(a) & (b)	Bengal Duars	1,55	56·63	3,324	3·99	1,55	44·42	2,178	2·25	2,42	49·65	2,234	1·94
14	(a) to (d)	Bhavnagar-Gondal-Junagad-Porbandar.	11,61	51·92	2,351	1·90	11,83	59·26	2,909	1·73	10,86	57·26	2,352	2·06
15	(a)	Burma	52,47	59·45	5,496	1·76	61,35	55·62	5,596	1·77	68,96	53·02	5,895	1·90
16	(a)	Deoghur	27	79·93	5,550	1·82	28	78·86	5,746	1·79	30	61·45	6,196	1·96
17	(a) & (b)	Dibru-Sadiya	4,51	42·86	5,303	1·74	5,86	49·96	5,720	1·99	5,14	51·50	5,813	2·01
4	(b) to (e)	Eastern Bengal State.	29,34	43·50	4,015	1·28	34,39	43·06	4,197	1·31	37,01	48·40	5,060	1·59
8	(c)	Hyderabad-Godavari Valley	27	41·81	1,044	1·19	6,42	60·41	2,209	1·41	10,87	54·07	2,702	1·44
18	(a) to (c)	Jodhpur-Bikaner	8,12	38·99	1,310	1·41	8,09	41 39	1,715	1·29	12,41	55·59	1,635	1·46
7	(d) & (e)	Nilgiri and Shoranur-Cochin	64	76·70	6,937	2·51	75	42 83	4,461	1·96	1,03	42·87	6,121	2·46
3	(b) (g) to (l).	Rajputana-Malwa	1,14,43	42·93	5,795	1 68	1,34,81	45·40	6,853	1·74	1,31,57	46·21	6,993	1·84
19	(a) & (b)	Rohilkund and Kumaon	8,69	50·09	3,100	1·50	8,15	47·97	2,900	1·40	7,89	44·90	2,817	1·31
20	(a) to (e)	South Indian	46,95	52·66	4,208	1·36	46,66	50·43	4,189	1·43	49,29	46·40	4,399	1·46
21	(a) to (h)	Southern Mahratta	51,43	67·78	3,297	1·78	56,29	64·78	3,530	1·61	57,15	70·45	3,583	1·77
22	(a)	Udaipur-Chitor	1,06	50·21	1,675	2·07	1,32	41 59	1,965	2·01	1,28	57·64	6,864	2·48
		West of India Portuguese	4,09	71·24	6,753	2·96	4,00	120·04	6,715	4·08	4,17	113·20	7,028	3·95
		2′ 6″ gauge.												
24	(a)	Barsi Light	91	58·63	4,240	5·11	82	65·89	3,798	7·41	89	52·69	4,106	5·01
25	(a)	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
28	(a)	Kalka-Simla	...	...	...	...	...	...	...	...	...	...	...	...
30	(a)	Morvi	2,50	59·56	2,654	1·37	2,64	62·49	2,803	1·17	2,33	65·00	2,470	1·40
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	...	...	...	...
19	(c)	Powayan Light	...	...	...	...	...	...	...	...	47	70·00	1,185	0·81
31	(a)	Banaghat-Krishnagar Light	38	81·84	2,514	1·81	50	71·95	2,469	1·67	54	78·03	2,663	1·80
33	(a)	Tarakeshwar-Magra Light	54	81·57	1,734	0·75	56	72·63	1,799	0·72	58	70·23	1,877	0·68
34	(a)	Tezpur-Balipara Light	69	72·51	3,450	2·09	70	73·12	3,500	2·12	67	79·84	3,347	2·05
		2′ 0″ gauge.												
36	(a)	Darjeeling-Himalayan	4,58	64·08	9,085	2·78	4,47	55·28	8,804	2·38	4,74	60·18	9,300	2·69
37	(a)	Howrah-Amta Light	1,38	53·02	4,821	1·94	1,33	51·99	4,647	1·77	1,46	56·21	5,104	1·82
38	(a)	Howrah-Sheakhala Light	52	70·77	2,398	1·44	49	64·71	2,491	1·41	55	70·52	2,806	1·61
39	(a)	Jorhat	1,02	106·16	3,947	3·40	1,02	118·07	3,855	3·78	87	105·01	3,069	2·55
		TOTAL	13,93,36	47·45	6,055	1·79	15,09,31	47·85	6,204	1·78	¶ 15,72,45	46·79	6,179	1·77

* Excluding steam-boat.
† Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
‡ Included with the Southern Mahratta railway from 1902.

DIX 12—*continued.*

and Appendix 44 (portion) in Report for 1902.]

each railway system.

graphs 17, 18, 22 and 25 of Report.)

THOUSANDS OF RUPEES—*concluded.*

EXPENSES.

1902.				1903.						NET EARNINGS IN THOUSANDS OF RUPEES—*continued.* 1899.				1900.				Number.
Amount.	Proportion per cent. on gross earnings.	Per mean mile worked.*	Per train mile.*	Amount. 1st half.	Amount. 2nd half.	Amount. Total.	Proportion per cent. on gross earnings.	Per mean mile worked.*	Per train mile.*	Amount.	Percentage on capital outlay.	Per mean mile worked.*	Per train mile.*	Amount.	Percentage on capital outlay.	Per mean mile worked.*	Per train mile.*	Main head.
		Rs.	Rs.					Rs.	Rs.			Rs.	Rs.			Rs.	Rs.	
7,43	56·43	5,352	2·02	4,41	5,60	10,01	66·36	7,208	2·15	4,42	3·48	3,181	1·08	5,50	4·24	3,965	1·30	1
72,80	51·20	4,493	1·68	42,43	42,59	85,02	54·69	4,702	1·81	47,21	2 83	4,102	2·03	77,13	4 43	6,406	2·32	2
83,83	48·96	11,313	3·09	48,35	43,38	91,73	49·92	11,715	3·18	96,31	7·26	14,074	3·21	88,33	6·19	11,369	2·69	3
50,03	48·18	18,284	2·30	26,65	24,74	51,39	50·27	18,489	2·39	45,90	6·47	17,250	2·30	50,24	7·00	18,847	2·47	4
†	†	†	†	†	†	†	†	†	†	15,15	1·78	1,907	1·02	26,55	3·01	2,352	0·95	9
2,58,80	36·74	11,940	1·52	1,25,04	1,21,19	2,46,23	33·89	11,120	1·50	4,37,30	9·89	22,187	2·95	4,60,79	9·79	21,540	2·82	5
2,12,87	50·17	13,591	1·97	1,22,02	1,08,47	2,30,49	49·18	10,170	1·86	1,67,15	5·52	10,613	1·72	1,61,15	5·26	10,632	1·70	6
55,87	50·78	4,360	1·53	25,72	23,96	49,68	49·52	§	§	34,47	2·69	3,136	1·51	59,65	4 56	4,722	2·08	6
91,09	54·86	6,565	1·98	48,39	53,11	1,01,50	58·51	7,253	2·19	51,29	4·13	5,989	1·90	54,37	4·20	6,365	1·98	7
18,73	39·89	5,281	1·86	10,97	8,36	19,33	41·79	5,450	1·95	26,87	6·23	7,571	2·62	30,81	7·12	8,686	2·63	8
																		9
2,23,93	53·59	8,346	2·01	1,13,55	1,07,06	2,20,61	45·04	8,159	1·70	1,78,90	8·23	7,160	2·00	1,46,61	3·35	5,664	1·77	
41,97	113·16	3,896	2·25	20,41	21,30	41,71	106 98	3,593	1·97	—7,19	...	—723	—0·56	—2,47	...	—237	—0·18	
68,81	51·28	6,079	1·61	33,25	35,24	68,49	49·19	5,768	1·55	60,77	5·16	5,899	1·91	56,72	4·43	5,206	1·66	10
18,42	87·86	3,102	2·41	9,43	10,15	19,58	80·64	2,960	2·27	8,23	0·60	782	0·53	3,64	0·62	838	0·61	11
47,04	46·35	3,410	1·10	24,79	23,71	48,50	40·71	3,395	1·12	41,51	5·38	3,604	1·34	40,89	4·60	2,753	1·24	12
2,69	51·09	2,359	1·24	1,52	1,76	3,28	49·37	2,431	1·47	1,18	4·31	3,925	3·65	1,24	3·39	2,739	2·83	13
10,02	59·40	2,172	2 03	5,40	4,42	9,82	50·27	2,122	1·39	10,79	4·80	2,309	1·75	11,75	5·25	2,581	1·72	14
72,30	57·93	6,112	1 89	42,06	41,89	33,95	61·66	6,197	1·90	35,79	4·11	3,839	1·23	48,95	4·48	4,528	1·45	15
24	79·75	5,050	1·63	...	...	30	73·17	3,263	1·88	6	2 32	1,324	0 46	7	2·56	1,540	0·46	16
4,98	54·77	5,686	2·19	2,66	2,60	5,26	53·89	5,920	2·25	4,71	5·40	5,550	2·17	4,81	5 36	5,651	2·12	17
39,93	49·41	4,569	1·46	22,67	21,61	44,28	51·78	5,018	1·54	38,11	7·16	5,543	2 84	44,39	7·38	5,247	1·82	4
13,20	57·69	3,373	1·64	6,25	7,03	13,28	59·98	3,394	1·60	36	0·18	1,453	1·66	4,21	1·81	1,447	0·93	8
13,06	52·18	1,710	1·38	6,33	6,91	13,24	48·26	1,607	1·38	12,72	12·51	2,832	2 21	19,13	6·00	2,146	1·62	18
2,59	58·23	4,727	2·61	1,52	1,74	3,56	53·54	4,354	2·42	20	0·42	2,182	0·79	1,01	2·06	5,955	2·62	7
1,25,79	47·46	6,400	1·89	58,82	57,29	1,16,11	49·67	5,832	1·93	1,52,78	9·99	7,767	2·25	1,64,35	10·35	8,308	2·19	3
8,76	47·00	3,143	1·38	4,40	4,07	8,47	46·65	3,025	1·55	8,69	7·45	3,089	1·50	8,76	7·25	3,110	1·59	19
50,97	45·82	4,341	1·42	24,21	27,60	51,81	40·21	4,149	1·35	40,95	5·86	3,783	1·23	45,29	5·66	4,109	1·40	20
60,65	65·09	3,884	1·67	29,52	29,44	58,96	61·51	3,582	1·65	24,44	1·93	1,567	0 85	30,60	2·39	1,919	0·88	21
1,20	53·31	1,787	2·31	57	54	1,11	62·63	1,655	2·15	1,05	5·27	1,661	2 05	1,86	9·38	2,759	2·82	22
‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	1,64	1·01	1,368	1·41	—66	...	1,743	—1·06	
97	64·81	4,511	5·29	39	38	77	59·23	3,579	4·66	65	4·75	2,991	3·61	42	3·13	1,966	2·48	24
...	...	...	...	...	21	21	57·74	2,236	1·47	...	...	...	...	...	...	...	...	25
...	...	...	...	...	25	25	78·09	2,896	1·80	...	...	...	...	...	...	...	...	28
1,92	62·85	2,032	1·27	79	74	1,53	61·43	1,625	1·08	1,70	6·78	1,802	0,93	1,59	5·82	1,663	0·71	30
...	...	...	...	13	14	27	155·58	1,952	1·42	...	...	...	...	...	...	...	...	2
53	70·24	1,340	0·87	24	19	43	60·34	1,097	...	...	...	...	...	...	...	...	...	19
55	71·97	2,708	1·79	27	26	53	60·86	2,598	1·73	8	1·16	558	0·29	19	2·59	960	0·64	31
59	70·52	1,910	0·68	30	30	60	70·40	1,984	0·70	12	1·27	398	0·18	21	2·18	674	0·27	33
63	74·53	3,165	1·99	33	34	67	70·72	3,350	2·03	28	5·52	1,308	0·79	26	5·29	1,299	0·79	34
4,72	55·54	9,112	2·51	272	2,73	5,45	56·65	10,514	2·25	2,57	7·33	5,035	1·53	3,62	10·34	7,095	1·92	36
1,32	49·86	4,614	1·80	72	67	1,39	50·32	4,366	1·87	1,13	9·88	3,941	1·53	1,23	10·36	4,301	1·64	37
50	61·33	2,546	1·47	27	25	52	59·85	2,638	1·40	31	3·52	986	0·61	27	4·40	1,358	0·79	38
90	104·22	3,114	1·87	55	42	77	85·02	2,596	1·47	—6	...	—229	—0·20	15	...	—592	—0·58	39
16,70,49	49·24	6,472	1·79	8,68,15	8,42,64	17,11,09	47·52	6,371	1·77	15,43,42	5·06	6,733	1·99	16,45,61	4·99	6,863	1·95	

§ Included with the Great Indian Peninsula railway.
‡ Excludes Rs. 20,597 paid to the Oudh and Rohilkhand railway on account of surplus profits.
† Including the Powayan Light railway, detailed information for which is not available.

Appendix 12.
General results.

APPEN

[Appendices 13, 22 to 27 and Appendi

General results of work

(Referred to in paragraph

Numbers.		Railway including branches worked.	NET EARNING			
			1901.			
Main head.	Sub-head.		Amount.	Percentage on capital outlay.	Per mean mile worked.*	Per train mile.*
					Rs.	Rs.
		5′ 6″ gauge.				
1	(*a*)	Bengal Central	6,48	4·98	4,629	1·72
2	(*a*), (*b*) & (*d*)	Bengal-Nagpur	61,49	2·90	3,824	1·67
3	(*a*), (*c*) to (*f*) & (*m*) & (*n*)	Bombay, Baroda and Central India	94,67	6·76	11,977	3·40
4	(*a*)	Eastern Bengal State	46,37	6·32	17,301	2·27
		East Coast	†	†	†	†
5	(*a*) to (*d*)	East Indian	4,72,87	9·03	22,506	2·81
6	(*a*)	Great Indian Peninsula	2,17,30	7·07	9,935	2·18
6	(*b*) to (*f*)	Indian Midland	51,04	3·80	‡	1·72
7	(*a*) to (*c*)	Madras	79,09	4·09	5,921	1·70
8	(*a*) & (*b*)	Nizam's Guaranteed State	28,05	6·43	7,908	2·81
9	(*a*) to (*h*)	North Western State—				
		Commercial	2,23,38	5·75	8,402	2·13
		Military	—44	...	—26	—0·02
10	(*a*) to (*c*)	Oudh and Rohilkhand State.	73,26	5·75	6,463	1·80
		3′ 3⅜″ gauge.				
11	(*a*) & (*b*)	Assam-Bengal	4,56	0·44	780	0·69
12	(*a*) to (*c*)	Bengal and North Western	53,67	5·26	4,010	1·49
13	(*a*) & (*b*)	Bengal Dooars	2,45	2·76	2,265	1·95
14	(*a*) to (*d*)	Bhavnagar-Gondal-Junagad-Porbandar	6,10	3·59	1,781	1·56
15	(*a*)	Burma	49,89	4·16	4,356	1·40
16	(*a*)	Deoghur	18	6·53	3,887	1·23
17	(*a*) & (*b*)	Dibru-Sadiya	4,85	4·93	5,474	1·90
4	(*b*) to (*e*)	Eastern Bengal State	39,47	6·07	5,332	1·67
8	(*c*)	Hyderabad-Godavari Valley	9,28	3·77	2,372	1·22
18	(*a*) to (*c*)	Jodhpur-Bikaner	9,94	4·85	1,350	1·13
7	(*d*) & (*e*)	Nilgiri and Shoranur-Cochin	1,38	4·50	8,159	3·27
3	(*b*), (*g*) to (*l*)	Rajputana-Malwa	1,53,12	9·57	7,857	2·15
19	(*a*) & (*b*)	Rohilkund and Kumaon	9,68	7·81	3,457	1·60
20	(*a*) to (*e*)	South Indian	55,97	6·44	5,082	1·69
21	(*a*) to (*h*)	Southern Mahratta	23,97	1·87	1,503	0·74
22	(*a*)	Udaipur-Chitor	94	4·56	1,369	1·82
		West of India Portuguese	—49	...	—1,696	—0·95
		2′ 6″ gauge.				
24	(*a*)	Barsi Light	79	6·13	3,686	4·49
25	(*a*)	Bukhtiarpore-Behar Light	...	...	...	...
28	(*a*)	Kalka-Simla	...	...	...	...
30	(*a*)	Morvi	1,26	4·55	1,330	0·75
2	(*c*)	Parlakimedi Light	...	...	...	...
19	(*c*)	Powayan Light	20	2·38	508	0·35
31	(*a*)	Ranaghat-Krishnagar Light	15	2·02	750	0·51
33	(*a*)	Tarakeshwar-Magra Light	25	2·57	794	0·23
34	(*a*)	Tezpur-Balipara Light	17	3·47	1,099	0·52
		2′ 0″ gauge.				
36	(*a*)	Darjeeling-Himalayan	3,14	9·02	6,152	1·70
37	(*a*)	Howrah-Amta Light	1,15	9·53	3,976	1·42
38	(*a*)	Howrah-Sheakhala Light	24	3·80	1,173	0·68
39	(*a*)	Jorhat	—4	...	—147	—0·12
		TOTAL	17,87,93	5·27	7,057	2·02

* Excluding steam-boat.
† Transferred partly to the Bengal-Nagpur railway and partly
‡ Included with the Great Indian Peninsula railway.
§ Included with the Southern Mahratta railway from 1901.
** Including the Deoghur railway, for which half-yearly figures

DIX 12—*concluded.*

44 (portion) in Report for 1902.

ing each railway system.

17, 18, 22 and 25 of Report.)

IN THOUSANDS OF RUPEES—*concluded.*

1902.				1903.						Number.
				Amount.						
Amount.	Percentage on capital outlay.	Per mean mile worked.*	Per train mile.*	1st half.	2nd half.	Total.	Percentage on capital outlay.	Per mean mile worked.*	Per train mile.*	Main head.
		Rs.	Rs.					Rs.	Rs.	
5,74	4·38	4,132	1·56	1,79	3,29	5,08	3·85	3,653	1·09	1
69,38	3·10	4,362	1·63	40,83	29,63	70,46	2·49	4,027	1·55	2
87,37	6·13	11,791	3·22	58,18	33,85	92,03	6·37	12,130	3·29	3
39,80	7·03	19,623	2·47	12,06	38,77	50,83	6·02	13,290	2·36	4
†	†	†	†	†	†	†	†	†	†	
4,45,54	8·87	20,676	2·64	2,51,54	2,28,85	4,80,39	9·29	21,864	2·56	5
2,11,38	6·86	9,763	1·65	1,59,97	78,23	2,38,20	7·66	10,496	1·92	6
53,96	3·98	‡	‡	33,34	17,31	50,65	3·65	‡	‡	6
74,95	3·81	5,402	1·63	42,08	29,89	71,97	3·58	5,142	1·55	7
28,23	6·41	7,958	2·79	15,61	11,32	26,93	6·09	7,592	2·71	8
1,93,95	4·11	7,234	1·75	1,23,48	1,45,68	2,69,16	6·76	9,964	2·08	9
—4,38	...	—431	—0·25	—1,71	—1,01	—2,72	...	—225	—0·12	
65,37	4·82	5,757	1·52	46,60	27,04	73,64	4·97	6,201	1·67	10
2,54	0·24	403	0·31	1,43	3,27	4,70	0·40	717	0·55	11
54,46	5·01	3,969	1·31	41,14	29,51	70,65	6·19	4,988	1·67	12
2,58	2·60	2,220	1·95	1,00	2,30	3,30	3·19	2,461	1·50	13
6,83	3·02	1,499	1·40	6,02	3,70	9,72	4·29	2,134	1·90	14
52,73	4·66	4,538	1·43	32,79	19,40	52,19	4·01	4,065	1·24	15
6	2·19	1,258	0·41	...	...	11	4·06	2,296	0·68	16
4,12	4·18	4,651	2·05	1,97	2,53	4,50	4·55	5,309	2·24	17
40,88	6·01	5,473	1·74	14,03	27,19	41,22	5·80	5,311	1·63	4
9,68	3·76	2,473	1·20	7,04	1,82	8,86	3·38	2,264	1·07	8
11,96	5·65	1,513	1·26	9,38	4,82	14,20	6·73	1,772	1·70	18
1,85	1·95	3,890	1·87	1,48	1,24	2,72	2·73	3,328	1·65	7
1,39,25	8·50	7,085	2·09	72,30	44,83	1,17,63	7·09	5,976	1·98	3
9,88	7·25	3,550	3·09	5,93	3,76	9,69	6·96	3,460	1·54	19
59,13	6·56	5,132	1·69	40,00	37,04	77,04	8·31	6,169	2·02	20
32,52	2·25	1,976	0·93	21,89	15,03	36,62	2·57	2,225	1·03	21
97	4·70	1,443	1·87	41	26	67	3·21	987	1·28	22
§	§	§	§	§	§	§	§	§	§	
53	4·02	2,449	2·87	31	22	53	4·28	2,424	3·22	24
...	...	...	...	...	15	15	2·16	1,035	1·08	25
...	...	...	...	...	7	7	0·49	317	0·51	28
1,13	4·56	1,201	0·75	76	69	1,45	5·89	1,534	1·02	30
...	...	...	...	—5	—5	—10	...	—376	—0·51	2
23	2·52	570	0·37	16	13	29	3·18	727	...	19
21	2·84	1,054	0·70	18	15	33	4·55	1,671	1·11	3
25	2·54	798	0·28	13	12	25	2·50	815	0·30	33
22	4·43	1,082	0·65	4	24	28	5·69	1,387	0·84	34
3,78	10·18	7,560	2·05	2,28	1,89	4,17	11·51	8,340	1·79	36
1,33	10·49	4,640	1·80	69	69	1,38	10·69	4,804	1·85	37
32	5·20	3,607	0·22	16	19	35	5·68	1,770	1·00	38
—3	...	—126	—0·08	5	9	14	1·51	488	0·26	39
17,22,20	4·92	6,718	1·96	10,45,49	8,44,13	18,89,73**	5·54	7,090	1·96	

to the Madras railway from the 1st January 1901.

are not available.

Appendix 13.
Gain or loss to the State.

(For capital outlay, gross earnings, net receipts, interest

Number. Main head.	Number. Sub-head.	Railway.	1879.	1880.	1881.	1882.
		State lines worked by Companies.				
1	(a)	Bengal Central	...	...	—51,616	—1,83,[illegible]
2	(a), (b) and (d)	Bengal-Nagpur	—83,911	—1,30,589	—1,96,876	—1,80,[illegible]
8	(b)	Bezwada extension	...	...	...	...
6	(b)	Bhopal-Itarsi (British section)	...	...	...	—47,[illegible]
5	(a)	East Indian	+59,14,239	+70,93,082	+82,73,743	+71,93,[illegible]
6	(a)	Great Indian Peninsula	—28,89,335	—19,41,485	+18,57,149	+28,89,[illegible]
...	...	Wardha Coal	—2,45,361	—3,88,762	—1,18,469	—1,40,54[illegible]
...	...	Dhond-Manmad	—4,35,189	—4,11,154	—2,70,850	—2,38,610
6	(e)	Indian Midland	—3,37,950	—3,37,491	—2,70,467	—2,55,072
7	(e)	Madras, North-East line (East Coast State railway)	...	...	...	...
11	(a)	Assam-Bengal	...	...	...	...
15	(a)	Burma	—4,05,695	—41,246	+58,867	+6,461
21	(c)	Guntakal-Mysore frontier	...	...	...	...
18	(c)	Jodhpur-Hyderabad (British section)	...	...	...	...
19	(b)	Lucknow-Bareilly	...	...	...	...
21	(g)	Mysore section (Southern Mahratta)	—23,960	—68,908	—45,159	—65,494
7	(d)	Nilgiri§	...	...	...	...
3	(j)	Palanpur-Deesa (British section)	...	...	...	...
7	(b) and (k)	Rajputana-Malwa	—13,01,536	—18,47,735	—1,52,461	+14,09,749
0	(a) and (e)	South Indian	—10,31,953	—11,98,626	—8,92,842	—7,38,543
21	(a)	Southern Mahratta	...	...	...	...
1	(c)	Tirhoot	—1,29,592	—16,997	—31,045	—1,32,565
		TOTAL	—9,70,243	+7,10,089	+81,59,974	+90,46,402
		State lines worked by State.				
4	(a) and (c)	Eastern Bengal State	—6,39,177	—87,456	+6,11,359	+10,29,523
...	...	East Coast State	...	...	...	...
9	(a), (f), (g) and (h).	North Western State	—44,92,145	—36,02,480	—71,51,301	—47,87,701
10	(a) and (c)	Oudh and Rohilkhand State	—9,80,064	—9,15,537	—9,38,438	—12,66,251
...	...	Cherra-Companyganj State	...	...	...	...
39	(a)	Jorhat State	...	...	...	...
		TOTAL	—61,11,386	—46,05,473	—74,78,400	—50,24,429
		Companies' lines guaranteed under old contracts.				
3	(a)	Bombay, Baroda and Central India	—11,55,900	—8,02,293	+4,78,703	—98,461
7	(a)	Madras	—36,29,035	—37,59,195	—36,40,509	—31,18,170
		TOTAL	—47,84,935	—39,77,641	—31,61,806	—32,16,631
		Companies' lines guaranteed under modern contracts.				
10	(b)	Hardwar-Dehra	...	...	...	...
4	(b)	Brahmaputra-Sultanpur	...	...	...	...
		TOTAL	...	...	...	...
		District Boards' lines.				
20	(d)	Tanjore District Board*	...	...	...	...
...	...	TOTAL GAIN OR LOSS TO THE STATE FROM RAILWAY OUTLAY.	—1,18,66,564	—78,73,025	—24,80,232	+8,05,342
		Unclassified expenditure including collieries, etc.				
...	...	Collieries	†	†	†	†
...	...	Unclassified expenditure	†	†	†	†
...	...	Guaranteed Companies— Land and supervision‡.	—6,32,840	—5,76,140	—7,47,450	—7,21,820
...	...	Subsidized Companies— Land, interest and subsidy‡	...	...	—1,32,260	—2,59,920
...	...	Miscellaneous railway expenditure‡	—1,96,830	—5,77,080	—5,18,600	—25,39,950
		TOTAL	—8,29,670	—11,53,220	—13,98,310	—35,21,690
		GRAND TOTAL GAIN OR LOSS TO THE STATE FROM RAILWAY OUTLAY.	—1,26,96,234	—19,26,245	—38,78,542	—27,16,348

* This line was purchased by the Tanjore District Board with effect from the 1st January
† Information
‡ The figures up to 1895
§ Purchased by the State

DIX 13.
in report [illegible]
from railway outlay.
27 of Report.
arges, etc.; see Statistical Table I incorporated in Appendix 38.)

Appendix 13.
Gain or loss to the State.

1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
—3,56,539	—4,81,871	—3,51,929	—4,17,738	—4,68,768	—3,61,797	—2,22,705	—2,58,047	—2,18,175
+3,10,577	+2,33,630	—92,706	—1,96,041	—10,32,356	—16,54,862	—25,93,204	—28,41,389	—8,21,223
...	...	...	...	—16,363	—39,357	—37,204	—38,212	—27,567
—59,135	—51,406	—53,874	—53,240	—46,150	—44,660	—55,422	—66,923	—9,106
+80,77,807	+47,41,188	+95,98,482	+60,74,842	+64,62,734	+47,58,555	+34,28,775	+42,62,988	+1,03,04,156
+17,09,262	—8,02,301	+1,16,586	+7,97,683	+3,32,601	+23,245	—22,22,799	+3,94,710	+13,04,438
+3,41,780	—49,316	—1,17,924	—1,42,292	—1,57,484	—86,503	+16,777	—6,295	—1,43,726
—2,10,446	—2,04,498	—1,89,921	—1,96,589	—2,10,555	—1,83,013	—1,89,892	—1,76,495	—1,31,713
—1,97,034	—2,01,519	—4,48,432	—16,54,742	—17,22,141	—24,81,284	—24,91,045	—30,09,506	—19,60,028
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	—5,898
—1,85,302	—1,47,279	—5,88,061	—3,23,093	+2,43,054	—5,46,600	—4,43,672	+2,12,883	+43,105
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	—5,356
—11,192	—35,733	—36,004	—1,19,841	—1,17,122	—1,04,472	—68,321	—98,361	—99,054
—1,19,676	—75,573	—43,946	—4,51,719	—5,29,666	—6,41,915	—5,33,330	—4,39,864	—3,97,137
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
+22,64,400	+18,02,129	+30,61,585	+31,54,764	+24,31,779	*+39,04,474	+30,27,785	+27,23,286	+61,24,386
—8,24,245	—10,47,980	—11,20,431	—15,04,582	—15,38,991	—17,48,365	—17,66,824	—9,95,600	—12,31,012
...	—14,95,327	—18,41,102	—21,54,828	—24,60,462	—23,04,012	—23,71,602	—22,54,816	—22,18,777
—2,39,309	—3,07,787	—2,26,926	—1,29,755	—84,076	—18,619	+1,36,314	+3,80,590	+4,19,463
+1,04,91,148	+18,76,357	+76,65,397	+26,82,829	+10,86,034	—15,33,676	—63,86,469	—22,08,511	+1,09,95,035
+12,54,710	+5,37,120	—3,80,378	—12,49,269	—11,56,378	+6,80,669	+11,28,969	+11,60,063	+13,82,736
...	...	...	...	...	...	...	—7,590	—2,33,786
—21,24,688	—30,05,670	—28,80,523	—47,15,042	—1,24,09,516	—1,08,98,096	—94,90,543	—88,63,307	—79,40,321
—6,55,133	—17,88,441	—28,57,972	—23,27,259	—22,63,090	—21,51,489	—7,67,822	—6,68,631	+2,16,792
...	—608	—15,360	—35,975	—48,950	—50,724	—45,067	—33,627	—31,551
...	—18,016	—26,850	—35,913	—40,380	—27,732	—32,600	—23,286	—28,543
—14,25,111	—42,75,015	—61,61,083	—83,63,458	—1,67,18,314	—1,24,98,372	—92,07,063	—84,36,378	—66,34,673
+12,33,049	+5,70,453	+7,89,257	+5,87,803	+24,754	—2,50,608	—55,566	+5,34,848	+5,56,776
—31,81,867	—34,87,745	—34,57,033	—38,95,709	—44,40,178	—41,02,286	—39,31,513	—23,64,478	—34,85,657
—19,48,818	—29,17,292	—27,47,781	—33,07,906	—44,15,424	—48,52,844	—39,87,079	—18,29,630	—29,28,881
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	—1,230	—10,873
—71,17,319	—53,16,150	—12,43,467	—89,88,535	—2,00,47,704	—1,83,84,892	—1,95,80,611	—1,24,73,289	+14,42,354
†	†	—45,223	—76,239	—5,413	+59,418	—54,165	+70,333	+63,127
—6,421	—10,076	—11,413	—1,91,842	—1,50,168	—1,88,203	—1,47,866	—2,39,338	—2,53,834
—6,73,260	—6,14,570	—7,95,530	—6,62,350	—5,14,350	—4,43,450	—3,09,520	—4,29,880	—1,92,570
—5,45,730	—3,95,510	—4,41,250	—4,52,430	—4,36,270	—2,80,710	—6,91,300	—3,62,880	—3,31,300
+12,94,050	—9,75,540	—9,92,740	—9,43,990	—5,18,470	—7,06,340	—14,91,240	—14,91,970	—9,20,600
+68,639	—19,95,696	—22,86,156	—23,26,851	—16,24,671	—15,59,285	—26,94,091	—24,53,735	—16,35,177
—71,85,858	—73,11,846	—35,29,623	—1,13,15,146	—2,16,72,375	—1,99,44,177	—2,22,74,702	—1,49,27,024	—1,92,823

1900, prior to which date it was known as the Mayavaram-Mutupet railway.
not available.
are for official years.
on the 1st January 1903.

Appendix 13.
Gain or loss to the State.

Appendix 7 (portion) in report

Gain or loss to the State

Referred to in paragraph

(For capital outlay, gross earnings, net receipts, interest

Number. Main head.	Number. Sub-head.	Railway.	1892.	1893.	1894.	1895.
		State lines worked by Companies.				
1	(a)	Bengal Central	—2,91,948	—3,01,662	—3,70,233	—2,95,158
2	(a), (b) and (d)	Bengal-Nagpur	—8,97,179	—11,35,374	—13,25,579	—13,15,356
8	(b)	Bezwada extension	—28,237	—22,916	+14,148	+37,380
6	(b)	Bhopal-Itarsi (British section)	—12,734	—26,391	—22,054	—43,209
5	(a)	East Indian	+83,55,041	+68,16,499	+61,59,068	+57,30,845
6	(a)	Great Indian Peninsula§	—24,22,723	—41,00,172	—86,30,196	—86,09,520
...	...	Wardha Coal	—1,65,241	—1,10,271	—1,10,219	—1,23,177
...	...	Dhond-Manmad	—1,14,200	—95,674	—66,025	—41,871
6	(e)	Indian Midland	—19,97,725	—24,39,785	—20,57,481	—29,49,135
7	(c)	Madras, North East line (East Coast State railway)	...	...	...	...
11	(a)	Assam-Bengal	—2,66,378	—7,09,987	—8,76,954	—14,03,683
15	(a)	Burma	+8,95,867	—4,77,503	—5,71,047	—2,98,807
21	(c)	Guntakal-Mysore frontier	...	—3,88,978	—1,06,655	—52,982
18	(c)	Jodhpur-Hyderabad (British section)	—61,598	—49,296	—32,878	—24,471
19	(b)	Lucknow-Bareilly	—44,551	—55,364	+23,585	—59,314
21	(g)	Mysore section (Southern Mahratta)	—3,83,023	—2,60,404	—5,05,935	—3,63,274
7	(d)	Nilgiri‖	...	...	...	...
3	(j)	Palanpur-Deesa (British section)	—1,031	—4,261	+2,998	+3,134
3	(b) and (k)	Rajputana-Malwa	+62,54,835	+62,99,914	+80,34,350	+68,02,117
20	(a) and (e)	South Indian	—11,74,088	—8,23,820	—11,04,396	—9,35,862
21	(a)	Southern Mahratta	—21,80,778	—17,60,861	—31,26,587	—26,13,740
12	(e)	Tirhoot	+3,65,790	+3,41,928	+4,64,835	+4,70,354
		Total	+57,55,437	+5,53,728	—42,82,773	—57,80,300
		State lines worked by State.				
4	(a) and (c)	Eastern Bengal State	+6,93,624	+10,32,643	+23,60,085	+29,51,494
...	...	East Coast State	—7,41,621	—11,95,136	—14,41,988	—15,33,702
9	(a), (f), (g) and (h).	North Western State	—1,19,59,146	—1,20,62,584	—99,97,343	—73,71,580
10	(a) and (e)	Oudh and Rohilkhand State	—2,63,082	—4,84,605	—5,74,985	—11,14,001
...	...	Cherra-Companyganj State	—21,677	—11,187	—9,692	—11,301
39	(a)	Jorhat State	—18,318	—17,577	—21,386	—14,199
		Total	—1,28,10,220	—1,27,37,846	—96,85,309	—71,43,289
		Companies' lines guaranteed under old contracts				
3	(a)	Bombay, Baroda and Central India	—2,13,741	+4,24,280	—2,73,810	+96,186
7	(a)	Madras	—40,70,236	—30,60,990	—47,08,606	—38,60,320
		Total	—42,83,977	—26,36,710	—49,82,416	—37,64,134
		Companies' lines guaranteed under modern contracts.				
10	(b)	Hardwar-Dehra	...	...	...	...
4	(b)	Brahmaputra-Sultanpur	...	...	...	...
		Total	...	...	...	...
		District Boards' lines.				
20	(d)	Tanjore District Board†	—37,331	—70,947	—37,759	—2,031
...	...	Total gain or loss to the State from Railway outlay.	—1,08,01,429	—1,47,49,881	—1,89,12,739	—1,66,85,692
		Unopen lines	...	...	...	...
		Unclassified expenditure including collieries, etc.				
...	...	Collieries	—42,981	—52,540	—40,019	—12,731
...	...	Unclassified expenditure	—2,61,588	—2,61,790	—2,62,080	—2,64,714
...	...	Guaranteed Companies— Land and supervision‡	—2,94,230	—3,40,040	—3,15,410	—2,88,080
...	...	Subsidized Companies— Land, Interest and subsidy‡	—2,90,256	—2,10,000	—1,66,940	—1,82,510
...	...	Miscellaneous railway expenditure‡	+1,08,600	—10,34,390	—10,03,600	—7,16,490
		Total	—7,80,459	—18,98,760	—17,88,049	—14,64,525
...	...	GRAND TOTAL GAIN OR LOSS TO THE STATE FROM RAILWAY OUTLAY.	—1,15,81,888	—1,66,48,641	—2,07,00,788	—1,81,50,217

* For the first-half of 1900. The figures for the second-half are included

† This line was purchased by the Tanjore District Board with effect from the 1st January

‡ The figures up to 1895

Includes the Khamgaon and Amraoti railways from the 2nd half of 1902. ‖ Purchased by the State on the 1st January 1903.

DIX 13—*concluded.*

Appendix 13.

for 1902.]

from railway outlay.

Gain or loss to the State.

27 of Report.

charges, etc., see Statistical Table I incorporated in Appendix 38.)

1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
—3,16,016	—1,15,155	—2,71,865	—1,62,803	—78,897	—11,495	—91,047	—1,29,456
—18,99,635	—21,55,681	—20,59,332	—12,54,039	+12,22,413	—20,18,325	—16,06,569	—19,24,943
—18,910	—1,788	+35,821	+1,24,264	+1,78,883	+1,21,420	+93,954	+1,20,715
—27,363	—30,671	—13,042	—9,223	+32,039	+45,246	+64,604	+74,158
+49,81,932	+95,51,062	+99,96,978	+1,20,39,680	+1,53,27,450	+1,56,32,623	+1,26,79,503	+1,56,54,820
—69,67,069	—95,62,825	—55,75,787	—40,85,456	—61,69,646	—26,08,937	—32,17,456	—6,09,880
—1,15,886	—1,41,263	—1,22,026	—1,17,352	—19,173*	Amalgamated with	the Great Indian Pe	ninsula railway.
—87,623	—1,74,958	—1,66,875	—1,59,741	—18,686*	Amalgamated with	the Great Indian Pe	ninsula railway.
—24,66,154	—18,47,325	—14,88,075	—11,88,511	+10,53,827	+1,79,562	+3,74,432	—94,622
...	...	...	...	...	—4,19,862	—8,27,059	—9,28,825
—23,39,796	—21,84,065	—23,90,724	—25,40,380	—29,67,026	—30,49,598	—35,53,969	—36,27,487
—4,57,691	—1,11,878	—3,22,452	—3,81,796	+6,98,192	+5,06,109	+4,06,495	+3,80,576
—24,926	+89,983	—1,03,555	—1,07,537	—78,123	—99,456	—61,787	—39,152
—7,044	—14,139	—7,394	—18,917	—1,13,051	+21,138	+59,043	+1,02,200
—60,229	—52,754	+68,627	+1,91,486	+1,31,249	+2,67,133	+2,74,374	+2,42,291
—3,16,483	—1,61,553	—4,92,026	—4,68,945	—3,58,069	—4,22,150	—2,79,959	—2,84,598
...	...	...	...	...	...	...	—91,509
+5,923	+2,938	+2,297	+4,288	+3,826	+1,218	—1,078	—1,584
+43,23,214	+35,38,707	+48,74,715	+76,45,126	+77,52,289	+66,86,362	+73,45,094	+50,51,759
—2,84,755	+95,225	—2,20,467	+98,041	+3,51,629	+12,31,900	+12,69,702	+26,53,126
—22,57,479	—21,77,394	—31,52,138	—25,00,987	—23,00,560	—28,01,445	—22,72,905	—21,45,393
+4,57,509	+5,16,277	+2,72,419	—82,442	—1,02,381	+4,31,068	+5,01,325	+11,01,785
—78,15,481	—49,62,539	—11,79,333	+70,23,762	+1,45,45,645	+1,56,89,451	+1,11,58,702	+1,55,03,978
+31,46,001	+21,26,831	+23,70,683	+22,38,416	+29,77,139	+18,59,493	+23,92,562	+18,12,850
—18,32,974	—18,04,343	—24,28,997	—19,77,308	—7,91,761	Amalgamated with	Bengal-Nagpur and	Madras railways.
—1,19,92,606	—86,56,592	—51,02,948	—75,12,384	—1,07,82,695	—37,96,445	—71,80,921	+1,42,984
—17,79,822	—22,80,708	—5,68,520	+1,01,393	—6,36,458	+9,07,963	—64,569	+4,31,557
—13,374	—45,566	—1,86,061	—43,173	—28,792	—22,125	Closed.	
—19,847	—21,978	—16,044	—43,174	—52,005	—40,417	—39,892	—22,814
—1,24,98,622	—1,06,82,856	—58,81,882	—72,41,237	—93,24,572	—10,91,531	—48,92,620	+23,64,577
—4,80,879	—14,18,196	+5,657	+3,74,775	—1,75,394	—62,670	—4,84,309	—2,77,188
—36,07,393	—25,90,167	—29,18,080	—30,41,890	—27,53,881	—25,36,139	—26,50,044	—28,71,967
—40,88,272	—40,08,363	—29,12,423	—26,67,115	—29,29,275	—25,92,800	—31,34,353	—31,49,155
...	...	...	...	...	+22,508	+29,941	+25,502
...	...	...	...	...	+18,961	+36,003	+28,981
...	...	...	...	...	+41,469	+65,944	+54,483
+1,500	+12,337	—22,216	—3,047	—4,952	—3,076	—16,393	+11,691
—2,44,03,875	—1,96,65,595	—99,51,422	—28,81,543	+22,86,346	+1,20,43,513	+31,81,080	+1,47,85,574
...	...	...	...	...	...	...	—5,61,558
+41,871	+17,542	+90,914	+92,757	+1,34,877	+1,91,673	+1,97,749	+1,32,128
—2,67,564	—2,69,474	—2,71,796	—2,90,852	—3,24,506	—5,26,762	—4,46,569	—3,09,624
+15,938	—1,61,611	—2,98,114	—7,26,013	—2,68,754	+1,94,361	+95,692	+1,790
—6,96,486	—9,58,305	—6,75,823	—2,84,004	—70,061	+3,36,465	+68,976	¶ —3,20,515
—5,81,805	—5,87,519	—56,973	—5,16,639	—8,86,011	—6,98,052	—10,55,292	—10,07,603
—14,88,046	—19,59,367	—12,14,794	—17,24,751	—14,14,445	—5,02,315	—11,39,444	—14,24,352
—2,58,91,921	—2,16,24,962	—1,11,63,214	—46,06,294	+8,72,391	+1,15,41,198	+20,41,636	+1,33,61,222

with those of the Great Indian Peninsula railway.
1900, prior to which date it was known as the Mayavaram-Mutupet railway.
are for official years.

¶ Total charge 3,04,446
Deduct—Repayment of advances of interest . 6,24,961
—3,20,515

Appendix 14.
Expenses under different heads.

APPEN
(Appendix 45 in

Working expenses under different heads of each railway

	No.	GAUGE.	5′ 6″							
		NUMBER.	1		2		3		4	
		Railway.	Bengal Central.		Bengal-Nagpur. (a) to (d).		Bombay, Baroda and Central India. (a) & (c) to (f) & (m) & (n).		Eastern Bengal State. (a) to (e).	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	15,771	16,558	1,84,340	2,05,376	1,45,388	1,40,969	1,56,898	1,66,295
	2	Maintenance of permanent-way { Wages . ,,	21,904	25,375	3,41,187	3,37,500	2,25,095	2,21,761	2,31,371	2,43,415
		{ Materials ,,	81,876	58,607	1,73,123	1,17,873	3,36,318	3,16,823	5,04,884	2,54,370
	3	Repairs of bridges, etc. . . . . ,,	3,261	7,033	1,71,421	1,34,434	91,340	92,061	65,310	95,197
	4	Conservancy of rivers . . . . . ,,	...	...	...	...	...	...	1,614	1,640
	5	Repairs of stations and buildings . . ,,	9,991	10,733	1,04,642	1,00,382	93,743	1,06,356	1,64,690	2,10,458
	6	TOTAL* . ,,	1,34,442	1,21,809	10,37,696	9,76,412	10,12,053	9,15,258	12,65,584	10,99,920
Locomotive.	7	General Superintendence . . . . ,,	7,523	7,529	1,19,562	1,19,670	1,12,818	1,03,647	91,900	92,406
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . . ,,	18,874	16,383	3,15,903	3,12,716	3,07,270	2,77,240	2,06,157	2,27,084
	9	Fuel . . . . . ,,	25,934	39,800	2,09,991	2,03,409	8,21,134	5,44,210	3,01,573	3,64,402
	10	Water . . . . . ,,	1,823	2,908	31,818	28,350	67,834	43,010	19,663	23,943
	11	Oil, tallow and other stores . . . . ,,	3,637	4,456	29,746	45,379	44,267	40,120	37,033	42,213
	12	Maintenance and renewal of { Loco. engines . . ,,	24,002	36,059	2,83,831	2,74,738	5,22,644	4,66,194	3,78,336	1,95,927
		{ Machinery . . . ,,	594	570	32,527	23,054	42,418	43,920	32,151	66,920
	13	TOTAL* . ,,	80,775	1,11,442	12,59,619	12,36,067	18,25,875	15,68,866	12,50,193	11,09,877
Carriage and Wagon.	14	General Superintendence . . . . ,,	3,710	3,711	23,605	23,708	40,564	39,509	46,977	48,241
	15	Repairs and renewal of { Coaching vehicles ,,	17,958	12,696	63,406	79,880	2,41,262	2,19,020	3,01,213	1,86,922
		{ Goods ,, ,,	9,926	12,235	1,01,227	88,476	3,36,218	2,74,189	1,14,005	1,21,621
		{ Machinery . . ,,	340	222	3,421	3,336	16,873	18,045	4,571	6,349
	16	Cleaning and oiling . . . . . ,,	5,372	5,338	96,787	91,841	53,641	53,977	33,853	37,933
	17	TOTAL* . ,,	37,306	34,203	2,96,371	2,90,851	6,92,034	6,12,142	5,13,677	4,15,255
Traffic.	18	General Superintendence . . . . ,,	11,964	12,878	1,23,973	1,28,237	93,303	89,143	1,63,299	1,60,559
	19	Station staff . . . . . ,,	34,215	52,846	2,87,490	2,90,020	3,44,872	3,28,993	5,56,213	6,39,476
	20	Train staff . . . . . ,,	6,422	7,670	87,580	98,430	88,298	81,238	1,12,364	1,18,168
	21	Fuel, lighting and general stores . . . ,,	5,467	6,645	65,937	86,176	1,18,949	77,541	1,08,573	1,06,127
	22	Clothing . . . . . ,,	11	992	8,107	1,916	14,094	7,835	8,431	9,607
	23	Printing, stationery and tickets . . . ,,	6,519	5,428	48,784	38,234	45,881	42,290	50,110	46,574
	24	Charges for delivery and collection of goods ,,	...	...	1,177	1,072	...	...	1,000	4,119
	25	TOTAL* . ,,	67,535	89,746	7,07,653	7,38,678	7,19,366	6,70,680	10,21,223	11,00,460
General.	26	Home expenditure or general administration ,,	19,589	19,043	1,48,119	1,51,561	23,337	26,971	25,417	...
	27	Agent's Office . . . . . ,,	14,934	14,589	45,974	45,896	25,919	21,569	46,746	47,344
	28	Audit, accounts and pay office . . . ,,	16,588	17,418	1,14,896	1,19,748	1,00,185	95,832	1,07,947	1,05,438
	29	Stores Department . . . . . ,,	2,343	2,327	25,159	25,599	38,244	37,207	16,661	17,678
	30	Medical Department . . . . . ,,	2,206	2,351	29,598	30,879	22,442	22,060	25,756	27,073
	31	Rents and Miscellaneous . . . . ,,	9,190	8,429	47,698	45,219	37,695	33,618	38,133	32,400
	32	Police . . . . . ,,	5,017	5,138	22,987	33,298	53,236	45,404	23,259	25,863
	33	Advertising . . . . . ,,	585	392	2,191	4,277	1,281	819	2,709	3,887
	34	Electric telegraph . . . . . ,,	12,801	12,489	1,37,270	1,44,152	1,21,941	1,18,399	1,16,291	1,19,932
	35	TOTAL* . ,,	82,763	82,128	5,74,331	5,96,788	4,30,906	4,02,322	4,04,209	3,84,309
Miscellaneous.	36	Law charges . . . . . ,,	1,784	540	2,004	1,730	2,331	1,230	3,154	2,371
	37	Compensation. . . . . ,,	265	3,185	6,169	2,578	10,912	13,137	38,453	13,089
	38	Rates and taxes . . . . . ,,	2,076	2,257	27,657	11,107	12,535	12,563	16,832	16,497
	39	Payments to other lines . . . . ,,	27,869	1,07,754	1,11,703	2,29,190	20,051	10,721	28,726	1,13,954
	40	TOTAL* . ,,	37,815	1,21,618	3,05,024	3,64,503	1,23,458	90,696	1,82,811	2,33,875
	41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT† . . . . . ,,	4,40,636	5,60,446	41,80,694	42,05,299	48,35,009	43,38,397	46,37,697	43,43,696
	42	Steam-boat service . . . . . ,,	...	...	75,366	66,986	...	...	2,93,923	2,91,028
		GRAND TOTAL WORKING EXPENSES† ,,	4,40,636	5,60,446	42,56,060	42,72,285	48,35,009	43,38,397	49,31,620	46,34,724

* Includes all other items of expenditure not enumerated.
† Includes special contribution to the Provident Fund.

(by systems) during each half-year of 1903.

5′ 6″												3′ 3⅜″		
5		6		7		8		9		10		3		
East Indian. (*a*) to (*d*).		Great Indian Peninsula. (*a*) to (*f*).		Madras. (*a*) to (*e*).		Nizam's Guaranteed State. (*a*) & (*b*).		North Western State. (*a*) to (*h*).		Oudh and Rohilkhand State. (*a*) to (*c*).		Rajputana-Malwa. (*b*) & (*g*) to (*l*).		No.
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
4,63,110	4,70,010	3,45,914	3,58,561	1,97,304	1,98,781	45,572	45,909	5,09,181	5,25,126	1,57,868	1,56,391	1,79,020	1,85,800	1
5,26,465	5,30,819	5,18,047	5,21,927	2,43,285	2,34,154	64,593	67,857	8,37,081	8,81,122	1,47,296	1,85,965	2,69,034	2,82,174	2
7,84,766	8,61,233	7,30,664	2,60,195	3,22,904	3,36,493	78,166	42,184	11,44,682	5,09,088	1,32,155	3,64,804	4,74,724	4,12,652	
3,14,057	2,63,417	4,15,690	2,98,693	1,33,889	1,94,964	26,480	44,935	2,59,504	3,40,413	1,48,080	94,625	1,09,414	1,21,069	3
...	...	...	...	...	...	...	111	47,752	51,284	1,553	11,271	...	...	4
3,28,763	4,88,895	3,18,935	2,77,699	1,10,262	90,161	17,787	17,942	5,10,317	3,84,215	1,17,322	1,08,876	1,14,148	1,38,378	5
28,57,861	28,87,207	§25,06,344	§19,24,799	12,24,479	13,12,872	2,60,684	2,50,310	37,79,993	31,64,241	7,89,085	10,49,758	12,38,542	11,88,715	6
3,26,088	3,22,914	2,77,402	2,84,583	94,174	1,06,344	25,942	23,813	2,92,963	2,96,610	73,923	73,391	1,41,282	1,39,253	7
11,67,542	10,48,986	14,16,899	11,98,669	2,90,494	2,90,375	61,833	52,511	7,29,766	7,51,663	1,45,604	1,51,962	3,60,943	3,70,245	8
5,14,276	4,40,545	21,82,445	17,07,810	6,95,291	7,40,248	71,690	54,178	21,84,641	24,02,774	4,27,526	4,03,754	8,09,508	7,21,306	9
59,564	61,191	1,72,041	1,29,496	41,035	45,413	9,363	7,571	1,02,348	1,03,183	14,541	16,384	55,472	54,693	10
1,84,801	1,63,499	1,95,754	1,50,682	54,306	55,985	11,876	9,092	1,07,750	1,14,493	35,370	31,361	53,489	51,788	11
11,15,096	11,11,486	14,82,274	15,71,154	4,12,004	6,32,907	2,51,682	47,298	15,53,038	10,85,911	1,61,614	1,69,199	5,45,128	6,15,071	12
71,357	75,001	82,360	1,01,223	15,397	16,653	6,912	5,949	88,810	1,20,402	13,402	19,699	53,336	59,269	
40,22,491	36,85,103	‖65,40,192	‖57,01,783	17,93,987	21,27,657	4,49,204	2,17,777	56,17,080	54,57,961	11,10,027	10,37,680	21,46,535	20,79,333	13
79,238	78,111	90,776	86,663	23,513	25,711	4,295	6,010	48,528	54,251	16,211	16,333	50,737	53,111	14
75,324	1,15,121	5,04,519	5,80,749	1,38,947	2,35,346	13,047	22,302	4,02,201	4,72,759	1,74,434	1,46,766	3,00,782	2,92,602	15
3,73,803	4,75,263	6,52,692	5,84,303	2,26,654	1,95,152	52,970	27,795	2,05,583	3,19,978	54,628	55,896	4,05,452	3,56,982	
59,132	67,098	38,437	56,074	10,275	11,375	1,636	1,576	14,023	14,007	4,989	5,781	21,216	24,351	
92,331	69,789	2,03,851	1,87,685	52,308	54,305	12,899	13,295	1,39,561	1,49,476	44,620	48,025	63,950	69,247	16
6,83,581	8,09,636	14,99,366	15,01,607	5,11,878	5,75,813	86,011	70,944	8,40,215	10,24,154	2,96,220	2,74,627	8,46,568	8,06,270	17
3,24,384	3,24,165	2,29,456	2,23,503	1,11,591	1,24,369	15,761	15,685	2,56,993	2,42,742	86,570	89,445	1,16,553	1,19,475	18
13,35,350	13,32,293	9,40,984	9,02,383	3,24,415	3,39,250	53,220	58,104	9,55,231	10,05,645	3,18,015	3,26,941	4,24,025	4,35,954	19
5,71,320	5,52,284	5,82,850	5,59,352	1,00,324	1,01,057	22,239	20,169	3,61,016	3,75,570	99,708	1,07,476	1,09,958	1,08,565	20
2,50,822	2,41,225	2,01,913	2,88,812	69,161	75,842	14,881	12,905	2,19,568	2,42,725	79,843	69,628	1,40,041	1,04,082	21
31,706	19,923	28,687	32,143	14,690	5,719	—109	2,482	18,372	42,172	14,701	9,386	17,352	10,320	22
1,36,813	1,15,642	1,30,000	1,47,309	72,954	70,445	7,031	6,417	80,555	95,149	40,831	35,979	56,201	55,755	23
4,853	4,961	5,013	4,444	4,531	1,070	...	139	254	197	1,694	1,619	...	...	24
27,65,949	26,31,103	§22,80,459	§22,41,112	7,22,281	7,47,861	1,30,403	1,29,706	19,34,524	20,30,910	6,31,646	6,67,585	8,86,604	8,89,216	25
2,07,303	1,95,355	1,72,402	1,83,198	53,939	59,546	16,005	19,746	38,900	...	18,900	...	35,631	36,396	26
63,394	64,577	71,229	70,915	34,838	37,933	8,294	8,333	65,534	62,344	31,206	32,968	31,826	28,287	27
2,25,987	2,23,137	2,46,117	2,48,930	1,06,505	1,23,906	32,386	32,622	2,17,977	2,11,553	86,236	86,298	1,23,887	1,27,151	28
76,814	75,976	72,744	72,326	15,332	16,773	6,606	6,559	53,855	53,972	19,713	21,583	47,897	50,005	29
72,503	73,909	47,205	47,519	19,191	22,566	4,840	6,295	51,407	51,799	13,500	14,435	27,841	29,365	30
1,06,548	88,537	63,376	66,122	24,376	27,585	8,203	9,897	66,706	71,266	26,652	35,637	46,733	44,704	31
1,18,686	1,08,235	97,651	96,524	43,576	45,752	17,364	17,250	60,149	64,193	21,768	21,720	64,500	58,591	32
3,474	5,735	5,979	3,478	3,559	3,313	37	391	3,625	1,831	1,221	2,314	1,610	1,105	33
3,61,377	3,59,554	2,80,847	2,94,125	1,20,164	1,28,629	17,773	17,632	3,06,596	3,06,009	90,453	97,625	1,50,012	1,56,315	34
12,89,147	11,99,093	§10,65,752	§10,90,983	4,65,242	5,14,706	1,12,009	1,13,752	8,75,647	8,30,563	3,09,960	3,12,876	5,32,043	5,32,516	35
8,062	8,148	4,320	2,207	1,584	3,616	336	316	90	—172	—11	414	2,931	1,727	36
67,830	41,948	24,006	1,07,762	2,235	—797	215	556	41,717	17,131	7,577	13,167	12,998	17,099	37
50,686	50,329	31,341	34,011	6,575	8,879	369	49	23,953	25,765	3,562	1,951	15,762	16,954	38
3,74,648	3,28,743	5,32,013	2,80,158	...	...	9,514	10,989	58,633	42,681	60,137	1,01,131	25,212	14,468	39
5,90,844	5,23,397	§8,82,038	§7,82,770	3,03,686	2,06,393	32,235	26,791	3,36,980	3,14,716	1,38,633	1,81,823	1,22,854	1,22,372	40
1,23,95,027	1,20,26,862	1,47,74,141	1,32,43,004	50,21,553	54,94,802	10,97,225	8,35,910	1,33,84,439	1,28,22,545	33,25,571	35,23,849	58,81,715	57,29,545	41
1,09,111	92,379	...	...	...	...	...	...	11,881	13,182	...	...	...	...	42
1,25,04,138	1,21,19,241	§1,47,74,141	§1,32,43,004	50,21,553	54,94,802	10,97,225	8,35,910	1,33,96,320	1,28,35,727	33,25,571	35,23,849	58,81,715	57,29,545	

§ Including the Gwalior Light railway, details for which are not given.
‖ Including the "Carriage and wagon expenses" of the Gwalior Light railway as the figures cannot be separated.

Appendix 14.
Expenses under different heads.

Working expenses under different heads of each railway

	No.	GAUGE.	3′ 3⅜″									
		NUMBER.	8		11		12		13		14	
		Railway.	Hyderabad-Godavari Valley. (c).		Assam-Bengal. (a) & (b).		Bengal and North-Western. (a) to (c).		Bengal Doors (a) & (b).		Bhavnagar-Gondal-Junagad-Porbandar (a) to (d).	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . Rs.	41,443	41,767	74,700	73,863	1,23,607	1,33,620	5,107	5,389	31,357	29,874
	2	Maintenance of permanent-way { Wages „	64,191	67,282	1,04,328	1,12,203	1,20,747	1,22,341	12,880	13,573	51,876	52,302
		{ Materials „	20,159	15,495	12,365	12,641	1,74,481	1,26,249	5,861	13,236	32,243	18,183
	3	Repairs of bridges, etc. . . . . „	22,253	51,837	34,873	29,136	83,814	1,10,339	3,405	1,208	1,525	1,283
	4	Conservancy of rivers . . . . „	...	...	...	...	13,409	3,948	...	...	...	...
	5	Repairs of stations and buildings . . „	14,916	21,693	26,289	23,232	65,955	61,303	1,438	1,407	4,995	5,051
	6	TOTAL* . „	1,94,527	2,50,869	2,69,444	2,71,160	6,39,989	6,21,444	29,163	35,888	1,33,179	1,05,228
Locomotive.	7	General Superintendence . . . „	29,022	28,786	30,033	32,365	51,819	49,635	2,909	3,404	16,582	16,104
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . . „	40,034	37,824	38,456	36,798	1,17,014	1,04,895	5,340	4,810	23,436	21,261
	9	Fuel . . . . . „	54,772	46,963	64,619	60,049	2,54,140	2,00,296	18,573	15,349	66,153	48,736
	10	Water . . . . . „	7,460	6,619	8,125	6,995	23,007	17,762	1,579	1,363	3,069	2,825
	11	Oil, tallow and other stores . . . „	7,466	5,899	5,869	5,678	26,701	23,072	1,411	1,461	5,559	4,418
	12	Maintenance and renewal of { Locomotive engines „	25,529	20,140	48,095	47,298	1,10,059	1,15,290	4,998	6,348	30,885	26,129
		{ Machinery . . „	4,897	6,139	598	649	1,707	4,272	2,003	1,242	2,044	2,057
	13	TOTAL* . „	1,64,452	1,71,418	2,10,522	2,07,321	6,32,666	5,68,357	37,531	35,530	1,52,178	1,17,381
Carriage and Wagon.	14	General Superintendence . . . „	3,595	3,359	10,013	10,458	18,155	17,514	1,455	1,701	4,939	4,756
	15	Repairs and renewal of { Coaching vehicles „	6,733	6,120	16,946	19,418	41,133	37,634	1,688	1,593	13,825	8,293
		{ Goods „ „	3,771	2,995	21,571	30,036	53,839	50,372	3,686	2,418	9,866	5,304
		{ Machinery . „	1,238	1,260	892	260	2,688	2,912	3	12	1,022	1,028
	16	Cleaning and oiling . . . . . „	6,851	7,358	6,326	5,499	36,533	31,267	2,758	2,827	3,934	3,875
	17	TOTAL* . „	22,188	21,093	55,979	66,536	1,41,542	1,33,944	9,907	8,683	33,895	22,484
Traffic.	18	General Superintendence . . „	17,612	17,398	31,432	32,919	77,400	77,725	4,525	5,030	15,427	22,737
	19	Station staff . . . . . „	44,664	46,068	69,619	92,790	2,00,535	1,94,779	11,972	16,277	48,505	38,654
	20	Train staff . . . . . „	17,735	17,149	17,691	16,074	58,400	53,052	2,142	2,473	5,593	4,886
	21	Fuel, lighting and General stores . . „	13,137	14,655	16,409	17,419	50,696	50,484	1,154	1,339	13,864	7,440
	22	Clothing . . . . . „	140	1,877	1,503	1,402	12,829	5,147	138	121	308	101
	23	Printing, stationery and tickets . . „	5,817	6,136	5,720	6,694	27,685	25,414	1,219	2,107	8,329	7,100
	24	Charges for delivery and collection of goods „	464	25	...	...	18,136	12,749	...	...	...	...
	25	TOTAL* . „	1,07,775	1,12,209	1,42,932	1,67,825	4,55,029	4,35,561	21,414	27,518	99,071	85,665
General.	26	Home expenditure or General administration „	17,818	21,982	48,571	45,043	61,571	62,819	12,969	16,686	2,420	2,503
	27	Agent's Office . . . . . „	9,235	9,278	25,123	27,908	19,980	27,315	13,569	18,824	12,359	12,490
	28	Audit, accounts and pay office . . „	36,081	36,316	49,952	52,714	85,665	88,574	5,318	6,448	25,914	25,944
	29	Stores Department . . . . . „	7,317	7,300	17,519	19,693	12,261	12,347	879	1,227	6,034	5,832
	30	Medical Department . . . . . „	8,389	9,533	13,014	14,007	13,128	12,887	942	995	7,893	7,306
	31	Rents and Miscellaneous . . . . „	5,295	10,157	5,575	4,246	17,316	15,642	705	1,477	6,624	4,872
	32	Police . . . . . „	14,950	15,027	8,476	7,781	25,313	25,632	313	457	17,637	17,187
	33	Advertising . . . . . „	40	847	375	529	753	1,202	100	72	8	246
	34	Electric telegraph . . . . . „	18,699	18,950	36,254	40,837	75,010	75,292	6,930	8,086	21,542	20,308
	35	TOTAL* . „	1,19,112	1,29,228	2,04,888	2,12,784	2,95,199	3,09,473	42,040	54,290	1,00,488	93,666
Miscellaneous.	36	Law charges . . . . . „	275	263	462	772	4,759	3,191	201	461	212	132
	37	Compensation . . . . . „	80	222	1,772	1,059	2,135	5,109	11	887	77	57
	38	Rates and taxes . . . . . „	...	...	2,492	2,097	2,913	2,865	209	114	19	10
	39	Payments to other lines . . . . „	2,540	2,468	1,954	491	42,660	21,821	6,719	3,431	4,280	3,196
	40	TOTAL* . . „	12,509	9,025	45,194	56,770	1,18,641	1,09,407	9,358	7,818	21,122	17,273
	41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT† . . . . . „	6,24,842	7,03,619	9,28,959	9,82,396	23,03,113	22,00,862	1,49,413	1,69,727	5,39,924	4,42,197
	42	Steam-boat service . . . . . „	...	...	8,764	10,187	1,72,759	1,70,298	3,113	5,842	...	...
		GRAND TOTAL WORKING EXPENSES† „	6,24,842	7,03,619	9,43,177	10,14,819 ‡	24,78,872	23,71,160	1,52,526	1,75,569	5,39,924	4,42,197

* Includes all other items of expenditure not enumerated.
† Includes special contribution to the Provident Fund.
‡ Including the Noakhali (Bengal) railway, details for which are not available.

DIX 14—*continued.*

Report for 1902.)

(by systems) during each half-year of 1903—contd.

3' 3⅜"

15		16		17		18		19		20		21		No.
Burma.		Deoghur.§		Dibru-Sadiya (*a*) and (*b*).¶		Jodhpur-Bikaner (*a*) to (*c*).		Rohilkund and Kumaon (*a*) to (*c*).		South Indian (*a*) to (*e*).		Southern Mahratta (*a*) to (*h*).		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1,49,581	1,63,004	...	...	8,845	9,107	19,476	19,327	19,700	18,959	1,30,181	1,38,577	1,35,030	1,33,351	1
3,41,581	3,74,671	...	...	17,912	18,498	80,761	82,602	25,296	25,870	1,24,692	1,33,323	2,04,624	2,08,796	
2,49,957	2,12,535	...	...	29,119	18,008	—26,601	88,236	29,791	28,194	87,103	2,18,670	1,15,138	78,772	2
1,17,247	98,777	...	...	9,785	5,179	13,011	4,591	13,778	10,880	22,930	22,046	45,548	33,258	3
184	266	...	...	...	...	...	...	1,888	—654	...	...	...	...	4
1,38,661	1,03,293	...	...	5,863	11,458	8,302	8,983	15,471	7,581	34,840	55,231	49,449	75,491	5
10,77,728	10,62,137	6,047		1,02,341	1,03,365	1,08,654	2,09,456	1,11,735	98,755	3,95,753	5,39,751	6,03,740	6,53,060	6
1,19,822	1,32,701	...	...	4,360	4,983	15,928	15,984	15,583	14,420	75,302	73,898	98,852	93,173	7
3,66,327	3,65,013	...	...	7,697	7,683	24,216	23,429	16,048	14,465	1,68,571	1,78,761	1,92,054	1,89,963	8
5,61,682	4,95,341	...	...	17,935	15,899	1,50,072	1,25,536	47,972	36,678	3,95,922	3,87,418	2,85,581	2,88,853	9
38,672	38,180	...	...	1,594	1,872	10,480	10,249	2,693	2,395	14,701	16,399	25,015	24,778	10
45,812	44,783	...	...	1,764	1,868	13,067	10,230	4,224	3,675	25,085	26,596	15,907	16,802	11
2,59,159	3,53,435	...	...	26,272	15,460	48,369	42,484	17,771	15,536	1,62,697	3,77,877	2,60,169	2,26,109	12
19,629	22,414	...	...	2,739	2,173	8,261	4,996	2,540	2,990	18,985	19,166	32,400	30,336	
15,08,396	15,18,742	7,771		62,365	49,989	3,02,695	2,84,949	1,18,199	97,867	9,01,972	11,43,810	10,44,818	10,09,592	13
34,683	38,414	...	...	2,543	2,925	3,919	3,586	6,691	7,307	25,029	24,618	31,362	30,741	14
1,00,692	1,15,365	...	...	3,719	3,722	12,583	10,662	10,670	10,995	88,028	60,225	1,02,167	96,826	
1,10,752	1,18,195	...	...	17,101	17,814	12,586	9,005	13,529	12,713	1,20,618	93,987	1,54,613	1,44,270	15
7,630	8,893	...	...	1,174	1,130	617	397	713	1,034	4,815	5,918	4,728	6,927	
39,718	39,354	...	...	2,993	3,993	8,514	6,199	5,251	5,214	29,387	29,933	20,155	22,226	16
2,98,530	3,26,681	4,282		27,522	29,639	38,264	29,959	37,015	37,437	2,64,494	2,08,499	3,13,816	2,99,613	17
1,00,935	1,07,939	...	...	6,496	6,419	15,353	15,409	16,643	15,472	76,771	77,142	75,689	76,383	18
2,95,615	3,11,962	...	...	12,987	12,990	37,603	33,894	30,648	28,161	2,08,208	2,17,040	1,94,720	1,86,664	19
82,857	91,643	...	...	3,436	3,417	6,680	6,588	7,842	7,213	50,358	51,428	67,975	65,192	20
95,941	77,744	...	...	904	621	10,726	10,034	8,192	7,675	38,293	45,181	44,711	40,152	21
11,211	11,076	...	...	...	2	532	1,034	574	602	11,094	1,472	10,250	6,550	22
48,015	55,756	...	...	2,165	3,001	9,586	8,734	7,628	4,854	27,354	17,896	31,699	30,631	23
...	858	...	...	4,142	6,182	...	...	...	...	28	6	124	2	24
6,41,301	6,64,161	7,876		31,326	33,892	81,579	76,392	77,292	70,619	4,23,207	4,20,375	4,56,019	4,39,407	25
1,01,649	1,03,690	...	...	12,921	12,921	...	...	19,648	20,874	46,454	47,686	94,617	93,200	26
34,276	38,062	...	...	6,167	6,062	4,311	3,707	7,762	7,883	25,757	30,160	23,912	45,893	27
88,318	89,170	...	...	7,130	7,359	19,909	19,078	20,906	20,217	88,602	87,764	88,258	89,005	28
25,111	25,571	...	...	3,049	3,165	3,279	3,395	5,759	5,729	21,161	21,891	22,879	22,228	29
21,483	22,276	...	...	2,049	2,060	2,736	3,799	2,036	2,270	20,810	20,926	17,504	18,690	30
8,340	10,343	...	...	1,134	3,084	40	162	7,201	6,634	16,084	18,108	18,572	17,200	31
57,248	54,256	...	...	...	...	2,803	2,691	7,039	5,409	29,105	27,184	31,625	43,627	32
4,768	5,528	...	...	16	...	56	97	289	493	486	1,241	931	1,383	33
94,421	94,045	...	...	6,083	5,702	26,513	25,910	14,570	14,461	69,573	71,249	1,08,491	1,10,681	34
4,49,959	4,55,467	2,386		39,712	41,601	63,173	61,483	85,251	85,791	3,65,431	3,73,188	4,62,237	4,52,835	35
2,783	3,925	...	...	634	620	...	...	227	1,740	622	87	1,604	3,443	36
3,981	2,438	...	...	80	61	9,489	285	721	966	1,634	1,092	1,344	6,057	37
1,806	26,485	...	...	...	26	...	...	80	172	12,309	14,181	8,048	3,571	38
...	...	...	...	...	...	26,994	23,079	...	...	8,076	10,364	3,820	9,984	39
83,205	1,11,272	1,474		714	718	43,397	29,358	5,791	13,324	70,748	74,559	71,492	89,442	40
40,59,114	41,38,460	29,836		2,65,498	2,60,590	6,32,762	6,91,597	‖4,64,246	‖4,26,404	24,21,605	27,59,682	29,52,122	29,43,949	41
1,46,620	50,962	...		...	...	...	...	...	...	...	...	...	...	42
42,05,734	41,89,422	29,836		2,65,498	2,60,590	6,32,762	6,91,597	‖4,64,246	‖4,26,404	24,21,605	27,59,682	29,52,122	29,43,949	

§ Details not available.
¶ Details exclude the Ledo and Tikak Margherita Colliery railway.
‖ Including the Powayan Light railway, detailed information for which is not available.

Appendix 14.

Expenses under different heads.

APPEN

(Appendix 45 in

Working expenses under different heads of each railway

	No.	GAUGE.	3′ 3⅜″		2′ 6″							
		NUMBER.	22		24		25		28		30	
		Railway.	Udaipur-Chitor.		Barsi Light.		Bukhtiarpore-Behar Light.§‡		Kalka-Simla. ‖		Morvi.	
		Particulars.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half	2nd half.	1st half.	2nd half.
Engineering.	1	General Superintendence . . . . Rs.	3,353	3,135	2,132	2,154	...	...	...	...	2,130	2,291
	2	Maintenance of permanent-way { Wages . „	7,619	7,768	2,554	2,565	...	...	...	...	9,486	9,561
		{ Materials „	22	...	50	53	...	...	...	...	1,024	892
	3	Repairs of bridges, etc. . . . . „	609	77	205	207	...	...	...	...	480	180
	4	Conservancy of rivers . . . . . „	...	...	...	...	...	...	...	...	...	...
	5	Repairs of stations and buildings . . „	1,194	710	575	642	...	...	...	...	103	307
	6	TOTAL* . „	13,552	12,094	5,516	5,621	...	3,668	...	...	13,362	13,522
Locomotive.	7	General Superintendence . . . . „	3,155	3,031	907	928	...	...	...	858	2,603	2,667
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc. . . . „	1,534	1,367	1,432	1,468	...	...	...	2,691	3,213	3,348
	9	Fuel . . . . . „	8,164	7,949	2,148	1,793	...	...	...	6,049	16,644	16,232
	10	Water . . . . . „	667	713	780	861	...	...	...	200	538	627
	11	Oil, tallow and other stores . . . „	457	456	545	541	...	...	...	1,419	949	1,150
	12	Maintenance and renewal of { Locomotive engines „	5,155	4,993	2,502	2,190	...	...	...	...	3,084	3,644
		{ Machinery . . „	648	393	27	186	...	...	...	168	3,840	4,805
	13	TOTAL* . „	19,840	18,902	8,341	7,967	...	4,251	...	12,624	30,828	32,279
Carriage and wagon.	14	General Superintendence . . . „	441	448	440	438	...	...	...	851	1,329	1,362
	15	Repairs and renewal of { Coaching vehicles . „	3,353	4,200	412	400	...	...	...	72	865	959
		{ Goods „ . . „	1,052	946	100	88	...	...	...	31	431	641
		{ Machinery . . „	12	26	16	144	...	...	...	...	2,180	1,179
	16	Cleaning and oiling . . . . . „	482	540	439	406	...	...	...	47	675	675
	17	TOTAL* . . „	5,384	6,209	1,407	1,476	...	488	...	1,003	5,662	4,947
Traffic.	18	General Superintendence . . . . „	3,562	3,175	632	642	...	...	...	1,403	2,361	2,635
	19	Station staff . . . . . „	3,338	3,254	3,227	3,160	...	...	...	2,068	6,855	7,019
	20	Train staff . . . . . „	411	344	291	296	...	...	...	1,498	1,292	1,285
	21	Fuel, lighting and general stores . . „	889	575	193	215	...	...	...	179	1,980	1,755
	22	Clothing . . . . . „	96	320	84	68	...	...	...	194	231	387
	23	Printing, stationery and tickets . . „	581	616	432	447	...	...	...	766	1,303	1,709
	24	Charges for delivery and collection of goods „	...	...	2,101	2,049	...	...	...	...	65	299
	25	TOTAL* . „	9,449	8,850	6,960	6,877	...	9,153	...	6,208	14,255	13,505
General.	26	Home expenditure and general administration„	...	...	3,286	2,516	...	...	...	...	...	...
	27	Agent's Office . . . . . „	3,078	2,764	3,468	3,419	...	...	...	3,981	2,740	1,969
	28	Audit, accounts and pay office . . . „	1,647	1,372	600	600	...	...	...	775	3,881	3,343
	29	Stores Department . . . . . „	193	185	687	675	...	...	...	...	1,126	1,246
	30	Medical Department . . . . . „	423	427	913	783	...	...	...	...	137	41
	31	Rents and Miscellaneous . . . . „	637	368	559	469	...	...	...	...	174	215
	32	Police . . . . . „	...	...	225	291	...	...	...	...	2,600	1,300
	33	Advertising . . . . . „	...	...	3	...	...	...	...	34	...	...
	34	Electric telegraph . . . . . „	1,666	1,599	868	867	...	...	...	283	2,927	2,979
	35	TOTAL* . „	7,644	6,714	15,609	14,620	...	2,970	...	5,073	14,319	12,282
Miscellaneous.	36	Law charges . . . . . „	...	...	...	30	...	...	...	...	—21	1
	37	Compensation . . . . . „	16	47	185	...	...	...	...	...	15	7
	38	Rates and taxes . . . . . „	...	100	1,091	570	...	...	...	...	...	...
	39	Payments to other lines . . . . . „	1,174	1,003	502	496	...	...	...	...	...	...
	40	TOTAL* . „	1,583	1,150	1,778	1,096	...	...	...	122	616	—4,278
	41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT.† „	57,452	53,919	39,611	37,657	...	20,680	...	25,030	79,042	74,257
	42	Steam-boat service . . . . . „	...	...	...	...	...	...	...	...	...	...
		GRAND TOTAL WORKING EXPENSES† „	57,452	53,919	39,611	37,657	...	20,680	...	25,030	79,042	74,257

* Includes all other items of expenditure not enumerated.
† Includes special contribution to the Provident Fund.
‡ Opened for traffic on the 1st July 1903.
§ Details not available.
‖ Opened for traffic on the 9th November 1903.

DIX 14—*concluded.*

eport for 1902.)

Appendix 14.
Expenses under different heads.

(by systems) during each half-year of 1903—concld.

2′ 6″						2′ 0″								No.
31		33		34		36		37		38		39		
Ranaghat-Krishnagar Light.*		Tarakeshwar-Magra Light.		Tezpur-Balipara Light.		Darjeeling-Himalayan.		Howrah-Amta Light.*		Howrah-Sheakhala Light.*		Jorhat.*		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	1,297	1,271	1,649	1,791	12,955	17,814	...	...	...	...	...	...	1
...	...	2,664	2,659	2,006	1,907	12,080	12,075	...	...	...	...	...	...	2
...	...	623	669	2,572	1,631	16,454	24,896	...	...	...	...	...	...	
...	...	96	159	227	423	6,848	4,963	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
...	...	333	547	893	1,972	12,064	16,597	...	...	...	...	...	...	5
5,141	5,216	5,132	5,361	8,175	8,101	65,224	79,926	13,947	14,415	7,597	5,897	13,288	12,493	6
...	...	595	606	930	1,050	3,686	4,251	...	...	...	...	...	...	7
...	...	1,190	1,091	865	887	18,076	15,755	...	...	...	...	...	...	8
...	...	2,566	2,589	2,760	2,706	37,532	27,699	...	...	...	...	...	...	9
...	...	361	347	37	15	524	313	...	...	...	...	...	...	10
...	...	529	500	340	303	4,657	4,230	...	...	...	...	...	...	11
...	...	929	1,210	2,025	2,649	16,671	15,409	...	...	...	...	...	...	12
...	...	...	...	...	...	196	229	...	...	...	...	...	...	
5,722	4,518	6,754	6,943	6,958	7,610	93,927	78,866	18,980	16,822	4,929	3,580	5,326	18,877	13
...	...	588	587	705	825	3,181	3,815	...	...	...	...	...	...	14
...	...	1,171	1,876	461	1,199	5,475	8,883	...	...	...	...	...	...	
...	...	957	189	523	613	14,204	10,368	...	...	...	...	...	...	15
...	...	...	...	...	...	60	65	...	...	...	...	...	...	
...	...	301	261	344	315	2,270	2,046	...	...	...	...	...	...	16
1,230	1,210	3,027	2,912	2,083	2,952	25,190	25,177	6,222	5,120	1,626	1,460	488	—3,971	17
...	...	529	546	1,468	1,710	3,133	3,554	...	...	...	...	...	...	18
...	...	3,813	3,871	2,598	2,737	16,864	15,054	...	...	...	...	...	...	19
...	...	822	815	586	586	7,192	7,001	...	...	...	...	...	...	20
...	...	585	410	286	109	4,246	2,614	...	...	...	...	...	...	21
...	...	20	25	35	...	1,012	565	...	...	...	...	...	...	22
...	...	1,168	1,135	481	206	1,197	779	...	...	...	...	...	...	23
...	...	...	...	2,063	2,284	...	...	...	...	...	...	...	...	24
11,064	11,686	8,146	8,002	8,169	8,322	38,485	34,075	22,571	22,923	9,805	10,760	9,590	7,788	25
...	...	1,229	1,176	1,664	1,224	11,046	11,052	...	...	...	...	...	...	26
...	...	1,688	1,802	1,530	1,530	14,099	16,075	...	...	...	...	...	...	27
...	...	1,984	1,922	2,396	2,392	9,035	9,315	...	...	...	...	...	...	28
...	...	179	178	124	114	...	...	...	...	...	...	...	...	29
...	...	155	153	430	652	2,706	2,855	...	...	...	...	...	...	30
...	...	339	406	411	286	3,764	3,478	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	37	44	6	14	305	255	...	...	...	...	...	...	33
...	...	934	933	498	498	4,349	4,370	...	...	...	...	...	...	34
3,314	3,223	6,533	6,626	7,109	6,710	45,304	47,400	7,443	7,052	2,946	3,344	6,265	6,100	35
...	...	407	70	30	30	326	679	...	...	...	...	...	...	36
...	...	30	...	16	3	308	49	...	...	...	...	...	...	37
...	...	...	6	15	613	4,490	4,592	...	...	...	...	...	...	38
...	...	18	36	...	...	...	...	...	...	...	...	...	...	39
...	...	579	183	151	713	7,962	8,604	...	...	...	...	503	370	40
26,579	26,023	30,171	30,027	32,595	34,408	2,72,449	2,72,365	72,725	66,893	27,058	25,041	35,460	41,657	41
...	...	...	...	...	...	...	...	...	...	...	...	...	...	42
26,579	26,023	30,171	30,027	32,595	34,408	2,72,449	2,72,365	72,725	66,893	27,058	25,041	35,460	41,657	

* Details not available.

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		5' 6" gauge.																					
			1899	2,3	23,9	48,5	1,514,8	141,5	1,731,5	7	23	34	5,48	17	6,29	33	6,94	12·00	6·09	3·50	2;92	...	3·04
			1900	2,3	23,3	53,4	1,539,9	164,2	1,783,1	7	22	35	5,78	17	6,59	34	7,16	14·21	7·40	3·50	3;00	...	3·12
			1901	1,9	19,5	61,4	1,610,5	192,2	1,885,5	6	23	42	6,24	17	7,12	36	7,71	14·55	7·35	3·47	3;00	3·08	3·11
			1902	2,1	18,3	63,9	1,614,7	212,2	1,911,2	7	21	44	6,27	18	7,17	30	7,79	14·13	7·20	3·47	3;00	3·05	3·10
			1903	2,8	19,9	73,8	1,639,3	253,2	1,989,0	8	22	47	6,27	21	7,25	32	7,90	14·24	7·21	3·42	3;00	3·05	3·11
1	(a)	Bengal Central	Average ...	2,4	21,0	60,2	1,583,8	192,7	1,860,1	7	22	40	6,01	18	6,88	29	7,50	13·83	7·05	3·47	2;98	3·06	3·10
			1903 1st-half	1,2	10,1	34,3	819,8	124,1	989,5	4	11	21	3,14	11	3,61	13	3,90	14·41	7·32	3·49	3;00	‡‡	3·11
			1903 2nd-half	1,6	9,8	39,5	819,5	129,1	999,5	4	11	26	3,13	10	3,64	19	4,00	14·08	7·16	3·37	3;00	‡‡	3·11
			1899	6,6	21,2	27,4	2,815,0	66,7	2,936,9	53	62	37	17,01	3	19,46	85	21,52	13·59	5·78	2·83	1;98	...	2·09
			1900	8,6	25,4	36,7	3,585,4	37,7	3,693,8	71	85	53	28,36	2	30,46	1,69	34,26	13·66	8·18	2·93	2;11	...	2·20
			1901	11,5	38,6	165,1	5,802,6	90,2	6,108,0	1,21	1,74	1,86	48,81	8	53,70	2,01	58,52	15·07	6·17	3·23	2;28	1·80	2·40
			1902	13,3	38,5	149,1	6,107,2	163,7	6,471,8	1,57	1,72	1,84	48,51	13	53,77	1,94	58,83	14·54	5·91	3·24	2;31	1·76	2·44
			1903	14,3	39,3	146,1	6,037,5	171,8	6,409,0	1,99	1,94	1,93	47,16	15	53,07	3,29	57,86	14·92	6·45	3·24	2;31	1·72	2·46
2	(a)	Bengal-Nagpur	Average ...	10,9	32,6	104,9	4,869,5	106,0	5,123,9	1,18	1,37	1,31	38,15	8	42,99	1,74	46,20	14·36	6·49	3·11	2;20	1·76	2·32
			1903 1st-half	7,3	18,1	73,8	3,110,0	82,9	3,292,1	1,00	91	98	23,81	7	26,77	97	29,07	15·13	6·37	3·31	2;30	‡‡	2·46
			1903 2nd-half	7,0	21,2	72,3	3,927,5	88,9	3,716,9	99	1,03	95	23,35	8	26,30	1,23	28,79	14·63	6·49	3·27	2;31	‡‡	2·47
			1899	78,1	606,1	383,3	10,634,0	5,204,5	16,906,0	1,41	4,55	6,61	27,59	3,08	43,24	4,68	49,96	9·71	4·65	2·99	2;30	...	2·64
			1900	76,9	595,5	404,4	11,487,6	5,285,2	17,849,6	1,36	4,38	6,77	32,65	3,14	48,30	5,31	55,62	9·66	4·20	2·99	2;32	...	2·60
			1901	71,4	550,1	420,6	11,713,8	5,387,9	18,143,8	1,46	4,56	7,24	34,69	3,23	51,18	5,47	58,66	10·97	5·58	2·99	2;47	1·44	2·61
			1902	69,2	555,0	378,1	12,069,8	5,821,5	18,893,6	1,57	4,54	7,10	35,26	3,36	51,95	6,60	59,59	11·25	5·68	2·99	2;47	1·41	2·60
			1903	67,9	563,0	377,6	12,277,6	6,368,1	19,654,2	1,63	4,65	7,09	37,45	3,73	54,65	5,94	62,86	11·46	5·68	2·99	2;48	1·40	2·59
3	(a) (c) to, (f), (m) & (n).	Bombay, Baroda and Central India.	Average ...	72,7	573,9	393,8	11,636,5	5,613,4	18,289,4	1,48	4,54	6,96	33,53	3,31	49,82	5,38	57,40	10·61	5·16	2·99	2;41	1·42	2·61
			1903 1st-half	38,5	307,0	195,7	6,355,7	3,458,3	10,355,2	87	2,34	3,55	18,94	2,13	27,63	3,09	32,15	10·26	4·64	2·99	2;24	‡	2·52
			1903 2nd-half	29,4	256,0	181,9	5,921,9	2,909,8	9,299,0	76	2,31	3,54	18,51	1,60	26,72	2,85	30,71	10·41	5·03	2·99	2;30	‡	2·58
			1899	47,6	132,0	946,7	9,929,0	847,4	11,902,7	1,06	1,16	3,00	20,55	1,10	26,89	3,22	30,30	12·89	6·25	3·01	2;50	2·74	2·70
			1900	45,0	126,5	982,8	10,947,8	863,8	12,965,9	1,07	1,18	2,84	20,86	1,08	27,03	3,80	30,81	13·61	6·59	3·08	2;50	2·73	2·65
			1901	42,4	126,8	991,5	10,891,0	1,219,9	13,271,6	1,00	1,26	3,10	21,21	1,58	28,16	2,38	32,04	13·85	6 48	2·99	2;44	2·51	2·62
			1902	39,7	117,1	1,050,3	11,201,9	1,234,8	13,643,8	1,12	1,34	3,29	21,90	1,55	29,20	2,52	33,22	13 94	6·54	3·04	2;51	2·49	2·69
			1903	43,4	117,8	1,127,2	11,757,8	1,285,1	14,331,3	1,24	1,38	3,63	22,63	1,67	30,55	3,08	35,38	14·05	6·31	2·99	2;51	2·51	2·69
4	(a)	Eastern Bengal State.	Average ...	43,6	124,0	1,019,7	10,945,5	1,090,2	13,223,0	1,10	1,27	3,17	21,43	1,40	28,37	3,00	32,35	13·67	6·43	3·04	2;49	2·60	2·67
			1903 1st-half	21,2	59,7	553,6	5,863,1	659,5	7,157,1	70	74	1,79	12,06	88	16,17	1,21	18,06	14·41	6·22	2·95	2;49	‡	2·72
			1903 2nd-half	22,2	58,1	573,6	5,894,7	625,6	7,174,2	64	64	1,84	10,57	79	14,28	1,87	17,32	13·53	6·44	2·96	2;49	‡	2·71
			1899	66,0	186,9	1,314,9	17,367,6	1,221,1	20,156,5	6,86	8,56	13,10	1,42,73	1,29	1,72,54	10,47	1,96,95	15·63	6·76	3·33	2;51	...	2·73
			1900	64,8	185,8	1,431,9	18,737,5	1,397,8	24,727,8	6,75	8,89	14,28	1,53,63	1,39	1,84,94	12,06	2,16,36	15·16	6·54	3·28	2;51	...	2·72
			1901	64,2	197,5	1,539,8	20,627,4	1,446,2	23,876,1	6,40	8,77	15,37	1,64,82	1,55	1,96,91	10,98	2,28,26	14·68	6·16	3·31	2;46	1·82	2·64
			1902	73,0	215,1	1,620,5	19,784,1	1,563,1	23,256,8	7,96	9,24	16,08	1,54,40	1,59	1,89,27	11,68	2,19,34	14·71	6·04	3·13	2;45	1·70	2·67
			1903	78,8	210,2	1,703,6	20,635,4	1,654,3	24,282,3	8,16	9,08	17,15	1,60,96	1,63	1,96,97	11,97	2,29,29	14·95	6·24	3·30	2;45	1·81	2·67
5	(a) to (d)	East Indian	Average ...	69,4	199,1	1,522,1	19,430,4	1,438,5	22,659,5	7,23	8,91	15,19	1,55,31	1,49	1,88,13	11,29	2,18,64	15·03	6·35	3·27	2;48	1·77	2·69
			1903 1st-half	43,8	105,4	878,4	10,700,7	802,5	12,530,8	4,64	4,64	8,61	81,87	78	1,00,54	5,35	1,17,89	14·71	5·69	3·24	2;44	‡	2·67
			1903 2nd-half	35,0	104,8	825,2	9,934,7	851,8	11,751,5	3,52	4,44	8,54	79,08	85	96,43	5,92	1,11,40	15·14	6·84	3·28	2;44	‡	2·66
			1899	72,8	366,7	864,4	10,520,3	4,820,3	16,144,5	5,51	8,14	6,52	41,71	1,71	63,59	10,31	82,11	10·95	4·14	3·00	1;91	...	2·34
			1900	67,9	325,0	465,3	11,715,2	5,117,5	17,690,9	5,27	7,45	7,73	45,31	1,85	67,61	11,33	88,02	10·96	4·14	3·00	1·91	...	2·31
			1901	69,7	388,8	553,3	13,819,6	5,278,0	20,109,4	5,22	8,71	8,78	58,87	1,84	81,42	10,65	1,00,91	10·94	4·30	3 00	2;00	0·95	2·27
			1902	71,3	433,2	583,0	12,472,0	4,809,6	18,349,0	5,19	10,35	9,77	57,13	2,08	85,52	11,76	1,09,16	10·95	3·74	3·00	2;09	1·12	2·39
			1903	84,6	431,4	769,0	14,361,4	4,574,4	20,220,8	6,46	9,95	10,48	58,66	2,21	87,76	12,55	1,12,32	11·32	4·20	3·00	2;11	1·19	2·43
6	(a)	Great Indian Peninsula.	Average ...	73,3	389,0	543,0	12,577,7	4,919,9	18,502,9	5,78	8,92	8,66	51,94	1,94	77,18	11,32	98,50	11·02	4·10	3·00	2;00	1·09	2·35
			1903 1st-half	41,9	229,1	384,4	7,272,2	3,446,8	10,374,4	3,27	5,16	5,08	29,01	1,23	43,75	6,12	56,58	11·12	3·99	2·99	2;16	‡	2·53
			1903 2nd-half	42,7	202,3	384,6	7,089,2	2,127,6	9,846,4	3,19	4,79	5,40	29,65	98	44,01	6,43	55,74	11·39	4·37	3·00	2 14	‡	2·50

* Entire system, as the separate information for different gauges is not available

DIX 15.

and portion of 44 in Report for 1902.]

traffic.

paragraphs 17 and 19 of Report.)

Average cost of carrying a passenger one mile in pies.	Average profit for carrying a passenger one mile in pies.	Average distance travelled in miles.						Average number of passengers in a coaching train.					Percentage of freight on capacity hauled.				Average number of vehicles in a coaching train.					Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Year.
		1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.				
1·43	1·60	38·78	29·03	34·17	22·43	...	22·95	0·47	3·07	7·48	144·43	155·45	2·68	11·38	11·12	29·02	0·99	1·19	1·24	7·91	14·53	10·64	200·54	211·18	1899.
1·23	1·38	43·21	22·97	32·28	22·41	...	22·79	0·45	2·70	8·99	172·49	184·63	2·44	9·55	11·71	37·37	1·07	1·28	1·49	9·51	16·31	12·43	212·56	225·05	1900.
1·05	2·09	44·27	30·35	37·99	24·79	5·68	23·35	0·41	2·07	12·10	210·03	224·61	2·19	10·17	12·70	41·35	1·06	1·39	1·74	9·21	17·16	15·09	239·52	254·91	1901.
1·25	1·85	45·03	30·44	33·13	24·82	5·48	23·19	0·43	2·74	13·02	201·52	216·76	2·99	10·88	14·62	42·47	0·83	1·20	1·50	8·55	15·82	14·40	225·45	239·85	1902.
1·66	1·45	38·04	29·12	35·60	24·43	5·37	22·53	0·38	2·08	9·41	147·49	159·36	2·72	9·37	13·97	38·86	0·77	1·05	1·22	6·09	12·33	10·63	195·04	205·67	1903.
1·32	1·77	41·87	28·38	35·63	23·79	5·51	22·96	0·44	2·53	10·00	175·19	188·16	2·60	10·27	12·82	37·81	0·94	1·22	1·42	8·05	15·23	12·65	214·68	227·33	Average.
1·80	1·31	‡	‡	‡	‡	‡	‡	0·33	1·97	8·02	142·85	153·17	2·26	8·74	12·12	38·29	0·81	1·04	1·20	6·76	12·53	10·19	194·00	204·19	1st half } 1903.
1·52	1·59	‡	‡	‡	‡	‡	‡	0·43	1·21	10·89	152·49	166·02	3·16	10·07	15·89	39·06	0·71	1·06	1·25	7·03	13·05	11·11	195·41	206·52	2nd half }
1·09	1·00	112·13	79·51	52·67	60·72	...	60·88	† 0·90	† 2·46	† 3·16	† 208·47	† 215·00	† 5·22	† 9·09	† 7·64	† 37·11	† 1·26	† 1·60	† 1·09	† 11·50	† 18·24	† 14·17	† 263·29	† 277·47	1899.
0·74	0·46	187·42	77·55	64·82	71·98	...	72·02	1·07	2·29	3·69	275·92	282·04	5·30	7·14	10·29	45·64	1·57	1·77	0·89	12·27	19·56	18·93	246·59	265·43	1900.
1·06	1·56	135·19	140·78	67·49	71·84	8·86	71·34	0·87	3·09	6·49	232·33	242·69	6·12	12·03	17·21	39·52	1·35	1·44	1·02	11·01	18·08	15·98	245·91	261·89	1901.
1·05	1·39	156·83	146·20	73·63	66·38	8·31	66·20	1·09	2·94	5·85	211·45	221·33	6·69	12·15	15·50	34·26	1·33	1·36	1·02	11·48	18·44	14·63	255·71	270·35	1902.
1·14	1·33	171·32	148·64	76·35	65·72	9·77	65·19	1·25	2·98	5·84	201·81	211·93	8·61	14·54	15·17	37 20	1·33	1·29	1·10	9·92	16·60	13·57	243·74	257·61	1903.
1·02	1·15	152·58	118·54	67·03	67·43	9 15	67·13	1·04	2·75	4·99	225 82	234·59	6·19	11 05	13·26	38·75	1·37	1·49	1 02	11·24	18·19	15·52	251·03	266·55	Average.
1·11	1·35	‡	‡	‡	‡	‡	‡	1·31	2·83	5·86	204 02	214·02	7·67	13·33	15·40	35·42	1·33	1·26	1·03	10·47	17·04	14·05	247·61	261·66	1st half } 1903.
1·16	1·31	‡	‡	‡	‡	‡	‡	1·19	3·13	5·82	199·61	209·75	9·95	16·54	14·87	39·23	1·34	1·30	1·17	9·38	16·26	13·70	239·86	253·56	2nd half }
1·39	1·21	20·39	14·80	110·61	16·68	...	18·68	2·13	14·44	28·24	168·45	213·27	8·00	16·24	44·15	41·55	1·18	2·03	0·96	7·12	14·38	16·04	222·86	238·90	1899.
1·39	1·17	20·56	14·62	107·50	18·22	...	19·97	1·94	13·14	27·31	187·25	229·65	7·58	15·10	14·47	41·25	1·14	1·88	1·01	8·04	15·30	16·92	232·05	249·02	1900.
1·31	1·30	35·65	28·51	110·66	22·99	7·99	20·79	1·95	12·66	27·55	185·58	227·74	7·88	14·94	43·27	41·86	1·07	1·93	1·12	7·95	15·17	16·88	232·95	249·81	1901.
1·49	1·09	38·64	27·62	120·52	22·66	7·92	20·28	1·97	12·07	26·53	184·51	225·08	8·08	14·34	41·13	41·67	1·04	1·95	1·22	7·88	15·35	16·98	237·48	254·46	1902.
1·53	1·02	40 05	27·94	120·52	23·63	8·00	20·61	1·89	11·97	23·13	183·93	220·92	8·30	14·07	45·83	41·82	0·95	1·99	1·03	7·90	15·30	16·63	237·77	254·40	1903.
1·42	1·16	31·06	23·69	113·96	20·84	7·97	20·07	1·98	12·86	26·55	181·94	223·33	7·97	14·94	43 77	41·63	1·09	1·98	1·07	7·78	15·10	16·70	232·62	249·32	Average.
1·36	1·16	‡	‡	‡	‡	‡	‡	2·03	13·18	25·63	193·20	232·09	9·25	15·54	45·00	42·90	0·98	1·99	1·08	8·09	15·48	17·39	239·34	256·73	1st half } 1903.
1·75	0·83	‡	‡	‡	‡	‡	‡	1·71	10·79	23·64	175·02	210·16	7·40	12·67	46·70	40·73	0 93	2·00	1·02	7·72	15·13	15·90	236·26	252·16	2nd half }
1·25	1·43	50·61	47·92	29·07	29·95	9·51	28·76	1·63	3 50	18·72	157·70	181·58	6·01	10·64	16·11	38·00	1·27	1·24	2·21	7·09	14·50	12·30	212·98	225·28	1899.
1·24	1·43	51·53	47·33	28·22	30·15	9·19	28·85	1·50	3·25	17·07	157·07	178·90	5·67	10·50	14·42	36·26	1·24	1·18	2·26	7·42	14·99	12·23	219·31	231 55	1900.
1·20	1·41	52·06	52·13	31·59	31·22	10·36	29·61	1·35	3·44	18·47	163·26	192·52	5·81	11·89	15·50	38·67	1·13	1·12	2·23	7·53	14·86	13·05	219·36	232·41	1901.
1·13	1·55	61·05	56·86	31·02	30·89	10·06	29 82	1·48	3·57	19·37	162·76	187·18	6·18	12·75	16·13	38 81	1·14	1·09	2·21	7·27	14·61	12·74	221·80	234·54	1902.
1·35	1·36	61·88	63·64	33·16	31·35	10·29	29·96	1·57	3·75	20 95	161·87	188·14	6·66	14·40	20·17	38·24	1·05	1·03	2·14	7·35	14·19	13·03	223·30	236·33	1903.
1·23	1·43	55·43	53·62	30·61	30·71	9·88	29·30	1·51	3·50	18·92	161·73	185·66	6·07	12·03	16·47	38·00	1·17	1·13	2·21	7·33	14·63	12 68	219·35	232·03	Average.
1·60	1·12	‡	‡	‡	‡	‡	‡	1·76	4·13	21·10	176·03	203·03	7·26	14·90	19·46	40·44	1·10	1·03	2·15	7·56	14·56	13·88	224·38	238·07	1st half } 1903.
1·08	1·03	‡	‡	‡	‡	‡	‡	1·39	3·38	20·82	143·24	173·83	6·05	13·85	20 91	36·01	1·01	0·96	2·13	7·15	13·84	12·50	222·27	234·77	2nd half }
0·75	1·98	120·23	111·14	52·26	56·75	...	60·01	1·54	4·46	13·98	200·83	220·81	6·63	13·15	19·19	34·53	1·59	1·51	1·40	10·03	17·80	16·29	236·69	252·98	1899.
0·76	1·96	121·44	122·14	52·39	59·80	...	60 07	1·44	4·39	14·20	198·35	218·38	6·73	14·51	21·80	36·76	1·44	1·37	1·29	9·43	16·78	16·53	226·52	243·10	1900.
0·76	1·88	130·27	138·40	57·87	62·45	11·32	59·87	1·35	4·43	14 69	207·93	228·40	6·29	13·99	21·87	37·16	1·46	1·43	1·33	9 52	16 90	17·11	243·16	260·27	1901.
0·83	1·85	142·34	130·37	57·01	61·20	11·52	58·52	1·62	4·61	14·86	189·81	210·90	7·36	14·06	20·35	34·90	1·55	1·47	1·51	9·24	17·05	15·85	254·62	270·46	1902.
0·79	1·88	133·09	132 82	58·58	61·17	10·43	58 38	1·57	4·20	15·25	189 62	210·64	6·88	12·90	22 65	36·64	1·60	1·44	1·47	8·85	13·36	16·04	272·91	288·95	1903.
0·78	1·91	129·47	128·17	55·62	60·27	11·09	59·37	1·50	4·42	14·59	197·81	217·83	6·78	13·72	21·17	36 98	1·58	1·44	1·50	9·21	16·38	16·37	246·78	263·15	Average.
0·78	1·89	‡	‡	‡	‡	‡	‡	1·78	4·61	15·20	190 24	211·83	7·65	14·28	22·05	37·03	1·62	1·43	1·45	8·77	15·58	16·32	221·33	237·65	1st half } 1903.
0·80	1·86	‡	‡	‡	‡	‡	‡	1·35	3·78	15·30	188·99	209·42	6·06	11·50	23·25	36·24	1 58	1·44	1·50	8·39	16·57	15·71	272·54	290·28	2nd half }
1·91	0·43	87·18	41·55	114·62	29·32	...	32·36	2·34	9·50	10·05	103·89	125·78	10·40	17·13	22·04	40·19	1 56	2·04	0·90	5 13	12·72	10·28	208·46	218·74	1899.
1·65	0·66	88·12	36·62	106·37	28·93	...	31·72	2·24	8·01	11·02	112 94	136·11	10·12	14·49	26·03	40·41	1·57	2·05	0·89	5·54	13·53	11·05	218·90	229·95	1900.
1·48	0·90	131·51	99·92	101·64	39·57	7·03	34·22	2·08	8·88	14·90	128·55	154·41	9·97	16·68	27 66	42·17	1·60	2·03	0·99	6·01	13·97	11·93	227·16	239·09	1901.
1·53	0·96	152·24	122·79	111·04	42·12	7·39	37·47	2·31	10 77	14·60	113·12	140·80	11·43	22·82	21·88	39·23	1·54	1·85	1 03	5·54	13·48	11·46	226·42	237·88	1902.
1·58	0·93	144·57	110·52	109·45	44·57	7·76	39·26	2·11	8·60	13·10	103·96	130·77	11·45	21·03	24·68	38·88	1·38	1·68	1·02	5·44	13·03	10·92	216·02	236·64	1903.
1·63	0·78	120·72	82·28	108·62	36·90	7·39	35·01	2·22	9·15	12·91	118·09	137·37	10·67	18·13	24·45	40·18	1·53	1·93	0·97	5·53	13·35	11·07	219·39	230·46	Average.
1·39	1·14	‡	‡	‡	‡	‡	‡	2·23	9·39	13·03	107·29	131·90	12·41	22·03	25·99	39·86	1·38	1·67	1·00	5·33	12·89	10·93	213·37	224·30	1st half } 1903.
1·76	0·74	‡	‡	‡	‡	‡	‡	1·99	7·82	13·11	106·64	129·56	10·52	19·96	23·46	37·95	1·39	1·69	1·03	5·55	13·17	10·32	218·65	228·97	2nd half }

† Bengal-Nagpur railway only.
‡ Information not available.

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		5′ 6″ gauge—contd.																					
			1899	11,9	43,1	319,1	1,669,5	6	2,034,2	1,30	1,72	4,65	14,04	...	21,11	2,27	26,36	10·80	4·58	3·00	2·25	...	2·88
			1900	11,2	37,3	292,4	1,584,8	1,0	2,226,7	1,18	1,55	3,77	15,06	...	21,56	2,25	26,73	10·66	5·26	2·97	2·55	...	2·85
			1901	12,2	43,5	312,3	2,160,0	6	2,528,6	1,26	1,91	4,05	17,82	...	25,04	1,79	29,79	11·35	5·31	2·97	2·55	10·75	2·85
			1902	13,7	51,5	271,1	2,212,2	2	2,548,7	1,75	2,28	4,14	18,53	...	26,70	1,94	33,44	10·68	4·43	2·95	2·55	12·00	2·87
			1903	*	*	*	*	*	*	1,77	2,21	3,18	20,33	...	27,49	2,21	33,58	11·11	4·30	2·99	2·55	...	2·84
6	(*b*) to (*f*).	Indian Midland	Average ...	12,2	43,9	298,7	1,979,1	6	2,334.5	1,45	1,93	3,84	17,16	...	24,38	2,10	29,98	10·96	4·78	2·98	2·49	11·37	2·86
			1903 1st half	*	*	*	*	*	*	1,01	1,14	1,71	10,69	...	14,54	1,18	18,01	*	*	*	*	*	*
			1903 2nd half	*	*	*	*	*	*	76	1,07	1,47	9,65	...	12,95	1,06	15,57	*	*	*	*	*	*
			1899	24,1	102,4	...	7,660,1	505,1	8,291,7	1,98	2,80	...	25,14	22	30,14	3,01	36,15	10·79	4·73	...	2·11	...	2·36
			1900	22,4	95,4	...	8,454,3	519,4	9,091,5	1,98	2,77	...	30,25	27	35,27	3,43	41,72	11·32	4·71	...	2·11	...	2·32
			1901	28,8	111,2	19,2	11,507,3	610,9	12,277,4	2,53	3,44	42	47,17	26	53,82	3,86	61,05	13·04	6·27	4·50	2·25	0·55	2·42
			1902	30,3	120,3	20,9	12,144,7	688,9	13,005,1	2,94	3,71	48	50,03	30	57,49	4,41	66,04	13·04	6·00	4·52	2·26	0·56	2·43
			1903	30,4	131,2	36,1	12,797,6	726,3	13,711,4	2,84	3,98	67	52,66	31	60,46	4,36	69,27	13·01	6·24	4·49	2·27	0·52	2·43
7	(*a*) to(*c*)	Madras	Average ...	27,2	112,1	25,4	10,510,8	610,1	11,275,4	2,45	3,34	52	41,06	27	47,44	3,81	54,97	12·24	5·59	4·50	2·20	0·54	2·39
			1903 1st half	16,0	64,0	19,9	6,507,8	349,4	6,943,1	1,54	2,04	36	27,07	11	31,12	2,15	35,70	13·16	5·15	4·50	2·26	†	2·46
			1903 2nd half	14,4	67,1	16,3	6,279,7	385,9	6,763,3	1,30	1,94	31	25,59	20	29,34	2,21	33,57	12·73	4·37	4·48	2·22	†	2·40
			1899	7,0	36,3	255,7	913,3	18,0	1,230,8	52	76	1,17	4,96	14	7,55	50	8,85	15·24	4·69	2·50	2·00	...	2·38
			1900	6,5	34,2	246,2	1,011,4	14,0	1,312,3	46	69	1,14	5,34	20	7,83	60	9,25	15·13	4·96	2·50	2·00	...	2·34
			1901	6,1	37,9	271,2	1,081,6	12,0	1,408,8	40	74	1,25	5,54	13	8,06	66	9,35	14·49	4·44	2·50	2·00	6·70	2·32
			1902	6,8	40,6	271,7	1,421,4	9,8	1,750,3	47	78	1,31	5,51	10	8,17	68	9,62	14·39	4·57	2·50	1·98	2·58	2·31
			1903	6,3	40,5	286,5	1,473,7	10,4	1,797,4	46	80	1,23	5,43	10	8,02	64	9,36	14·27	3·97	2·50	2·00	2·24	2·31
8	(*a*) & (*b*)	Nizam's Guaranteed State.	Average ...	6,5	37,9	263,5	1,180,4	12,8	1,499,9	46	75	1,22	5,36	13	7,93	62	9,29	14·70	4·53	2·50	2·00	3·84	2·33
			1903 1st half	3,6	21,4	137,5	762,5	5,7	930,7	28	43	64	2,94	6	4,34	36	5,14	14·76	4·35	2·50	1·98	†	2·31
			1903 2nd half	2,7	19,1	129,0	691,2	4,7	846,7	18	38	59	2,49	4	3,68	28	4,23	14·31	4·51	2·50	1·98	†	2·29
		North Western State. Commercial section.	1899												99,45	5,98	1,12,79						
			1900												1,06,24	6,75	1,20,77						
			1901												1,16,55	7,46	1,32,79						
			1902												1,22,10	7,50	1,39,87	†	†	†	†	†	†
			1903												1,34,56	9,95	1,57,35						
			Average ...	†	†	†	†	†	†	†	†	†	†	†	1,15,90	7,53	1,32,76						
			1903 1st half												69,84	3,52	80,44	10·89	4·57	3·00	2·26	...	2·49
			1903 2nd half												64,72	4,43	76,91	11·17	4·72	3·01	2·59	...	2·42
			1899												11,49	87	13,11						
			1900												11,87	1,03	13,93						
			1901												13,34	1,19	16,00						
			1902												14,54	1,00	17,04						
			1903												15,09	1,12	17,30						
9	(*a*) to (*k*).	Military section.	Average ...	†	†	†	†	†	†	†	†	†	†	†	13,25	1,04	15,28	†	†	†	†	†	†
			1903 1st half												7,43	36	8,37						
			1903 2nd half												7,66	76	8,93						
			1899	52,6	173,6	744,5	16,286,3	...	17,257,0	3,77	4,78	8,04	94,26	...	1,10,85	6,85	1,25,90	10·89	4·61	3·01	2·26	...	2·42
			1900	48,2	170,5	916,6	17,054,4	...	18,189,7	3,64	4,57	9,39	1,00,51	...	1,18,11	7,78	1,34,70	10·72	4·84	3·01	2·26	...	2·41
			1901	53,6	188,8	1,325,8	18,722,4	...	20,293,6	3,84	5,21	11,64	1,09,35	...	1,30,04	8,65	1,48,79	10·37	4·41	3·01	2·27	...	2·42
			1902	57,0	204,4	1,307,5	19,253,1	...	20,822,0	4 21	5,62	11,99	1,14,83	...	1,36,65	8,50	1,56,91	10·81	4 33	3·02	2·27	...	2·43
			1903	67,0	217,4	1,316,4	21,176,8	...	22,777,6	,86	5,65	12,79	1,26,35	...	1,49,65	11,07	1,74,65	11·16	4·70	3·02	2·27	...	2·43
		Total .	Average ...	55,7	190,9	1,122,8	18,498,6	...	19,868,0	4,06	5,17	10,77	1,09,06	...	1,29,06	8,57	1,46,19	10·79	4·58	3·01	2·27	...	2·42
			1903 1st half	34,7	112,9	686,6	10,216,2	...	11,044,4	2,58	2,85	6,49	65,35	...	77,27	3,88	88,81	†	†	†	†	...	†
			1903 2nd half	32,3	104,5	635,8	10,960,6	...	11,733,2	2,28	2,80	6,30	61,00	...	72,38	7,19	85,84	†	†	†	†	...	†

DIX 15—*contd.*

ınd portion of 44 in Report for 1902.]

raffic.

graphs 17 and 19 of Report.)

Average cost of carrying a passenger one mile in pies.	Average profit from carrying a passenger one mile in pies.	Average distance travelled in miles.						Average number of passengers in a coaching train.					Percentage of freight on capacity hauled.				Average number of vehicles in a coaching train.					Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Year.
		1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.				
1·66	1·22	186·02	158·46	82·03	100·14	...	69·42	2·37	6·95	...	135·95	145·28	7·94	16·67	30·68	30·02	2·01	1·98	...	7·85	15·38	11·64	232·81	244·46	1899.
1·61	1·24	175·05	150·62	83·37	61·28	...	66·51	1·90	5·16	...	122·39	129·44	8·55	12·30	30·51	29·84	1·92	1·96	...	7·27	14·13	10·32	226·53	236·85	1900.
*	*	175·18	158·85	83·76	63·41	7·44	68·29	*	*	...	*	*	*	*	*	*	*	*	...	*	*	*	*	*	1901.
*	*	229·96	191·92	99·16	64·57	16·33	78·02	*	*	...	*	*	*	*	*	*	*	*	...	*	*	*	*	*	1902.
*	*	202·87	207·57	113·35	63·00	...	70·01	*	*	...	*	*	*	*	*	*	*	*	...	*	*	*	*	*	1903.
1·63	1·23	193·98	173·08	92·33	70·48	10·38	69·26	2·13	6·05	...	129·17	137·36	7·24	14·53	30·58	29·93	1·96	1·97	...	7·56	14·75	10·98	229·67	240·65	Average.
*	*	†	†	†	†	†	†	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1st half 2nd half } 1903.
1·30	1·17	136·36	88·55	...	28·24	...	29·54	2·68	9·40	...	185·94	198·22	17·35	27·12	...	42·67	1·63	1·75	...	8·53	13·28	14·71	180·24	194·95	1899.
1·11	1·21	141·60	88·94	...	30·97	...	32·10	2·59	8·85	...	210·04	221·49	16·44	29·35	...	45·27	1·33	1·57	...	8·93	13·28	16·52	181·42	197·94	1900.
0·95	1·47	129·43	94·53	93·31	34·98	14·82	34·82	1·90	6·62	0·85	192·94	202·31	12·07	24·50	5·95	44·06	1·27	1·43	0·33	8·24	12·55	14·30	184·08	198·37	1901.
1·21	1·23	142·89	98·73	97·33	34·06	14·94	34·84	3·28	7·60	0·98	211·03	221·89	15·96	31·65	11·96	40·63	1·31	1·50	0·26	9·01	15·44	15·96	224·74	240·59	1902.
1·29	1·14	137·69	93·29	79·66	34·88	15·75	34·77	2·16	8·10	1·41	221·86	233·53	17·33	30·44	16·71	40·90	1·37	1·45	0·26	9·4	15·93	16·46	230·06	246·52	1903.
1·15	1·24	137·59	92·81	90·10	32·81	15·17	33·21	2·36	8·11	1·08	204·36	215·40	16·43	28·64	11·54	42·71	1·35	1·56	0·28	6·83	14·09	15·55	209·10	215·65	Average.
1·15	1·31	†	†	†	†	†	†	2·44	7·74	1·56	230·09	241·83	19·08	28·69	16·03	42·30	1·41	1·58	0·27	9·44	16·07	17·15	231·42	248·57	1st half } 1903.
1·44	0·96	†	†	†	†	†	†	1·99	8·45	1·26	213·92	225·52	15·54	32·17	15·37	39·56	1·33	1·54	0·26	9·44	15·29	15·89	228·74	244·54	2nd half }
0·82	1·56	89·70	87·65	35·12	51·99	...	49·90	3·17	15·51	...	253·94	272·63	9·56	34·32	...	34·87	2·59	2·65	...	12·10	21·63	19·89	281·41	301·30	1899.
0·87	1·47	83·31	77·86	35·65	50·70	...	48·91	2·35	13·01	...	228·72	243·09	7·37	28·43	...	37·14	2·50	2·48	...	10·50	19·47	12·06	266·45	282·10	1900.
0·78	1·54	88·03	84·93	35·45	49·20	31·35	47·47	1·16	6·23	...	118·13	126·21	6·49	28·75	...	35·91	1·57	1·42	...	5·62	16·16	8·93	191·22	200·15	1901.
0·95	1·36	92·48	80·49	36·90	37·51	78·08	38·86	2·49	12·80	...	214·56	229·85	7·74	26·61	...	34·40	1·13	1·03	...	5·12	9·31	7·97	127·78	135·75	1902.
1·06	1·25	97·73	95·83	35·44	35·22	79·12	37·10	2·21	13·83	...	221·53	237·57	6·23	24·26	...	33·39	1·08	1·18	...	5·20	9·61	7·90	133·69	140·53	1903.
1·30	1·44	90·05	85·25	35·71	44·72	62·35	44·45	2·28	13·22	...	207·37	221·87	7·50	28·47	...	35·24	1·27	1·42	...	7·71	14·03	13·47	199·49	211·96	Average.
1·01	1·30	†	†	†	†	†	†	2·67	15·51	...	244·26	262·44	7·55	27·47	...	35·27	1·06	1·17	...	5·41	9·75	8·64	131·40	140·04	1st half } 1903.
1·11	1·18	†	†	†	†	†	†	1·72	12·22	...	199·82	213·81	6·17	31·24	...	37·41	1·15	1·23	...	5·20	9·65	7·14	133·98	141·02	2nd half }
								1·62	4·91	12·82	190·63	210·00	8·27	17·95	26·80	38·96	1·43	1·43	1·41	9·13	17·16	14·93	240·40	255·33	1899.
								1·48	4·15	13·09	190·68	210·29	7·71	14·74	29·63	41·11	1·29	1·37	1·23	8·82	16·43	15·04	231·73	246·78	1900.
								1·39	4·60	15·44	181·04	202·47	7·33	17·79	31·16	35·51	1·38	1·34	1·47	8·98	16·15	14·24	229·28	243·53	1901.
								1·31	4·49	14·08	170·34	170·21	7·28	18·42	28·90	37·00	1·07	1·22	1·44	8·89	15·58	13·52	224·35	237·87	1902.
								1·29	3·61	13·15	165·63	183·68	7·99	16·56	28·18	37·68	1·11	1·11	1·37	8·33	21·92	13·35	215·36	228·70	1903.
†	†	†	†	†	†	†	†	1·42	4·35	13·90	179·66	195·33	7·72	17·09	28·94	38·65	1·28	1·29	1·42	8·81	15·45	14·22	226·23	242·45	Average.
1·06	1·43							1·51	4·07	14·44	185·93	205·95	8·71	17·20	29·63	40·53	1·20	1·17	1·43	8·69	15·27	14·48	222·09	236·57	1st half } 1903.
1·02	1·40							1·19	3·22	12·64	149·11	164·47	7·28	15·47	26·82	35·01	1·03	1·06	1·32	8·02	14·02	12·37	209·54	221·91	2nd half }
								1·05	2·99	6·04	163·24	173·32	5·15	13·39	16·03	30·28	0·96	0·96	0·95	9·75	15·90	13·69	229·43	242·12	1899.
								1·16	2·55	6·06	159·10	168·87	5·56	11·61	17·95	30·69	0 97	0·93	0·83	9 82	15·61	12·76	226·54	239·31	1900.
								1 07	2 59	5·71	149·07	158 44	5·91	13·38	16·03	31·64	0·99	0·90	0·94	9·10	14·66	12 10	216·10	225·20	1901.
								0·93	2·78	6·24	128·86	139·71	5·44	15·67	16·95	30·59	0·85	0·85	1·05	9·20	13·72	10·66	206·42	216·08	1902.
								0·87	2·13	5·05	109·62	117·67	5·98	13·88	15·68	28·33	0·78	0·74	0·90	7·95	10·37	8·50	182·86	191·35	1903.
†	†	†	†	†	†	†	†	1·02	2·61	5·80	141·98	151·40	5·61	13·47	16·33	30·45	0·89	0·88	0·94	8·93	14·03	11·32	212·27	223·59	Average.
		†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	1st half 2nd half } 1903.
1·19	1·23	116·12	106·38	64·83	44·08	...	45·82	1·55	4·68	12·01	187·42	205·67	7·88	17·53	25·74	38·10	1·38	1·37	1·36	9·20	17·00	14·66	239·11	253·77	1899.
1·30	1·11	135·33	106·43	65·52	50·06	...	51·59	1·43	3·96	13·05	186·86	205·31	7·42	15·31	28·59	39·88	1·34	1·32	1·36	8·94	16·38	14·77	231·10	245·87	1900.
1·18	1·24	132·66	120·09	55·87	49·50	...	50·80	1·35	4·36	14·27	173·14	192·12	7·17	17·38	29·89	37·68	1·32	1·28	1·41	9·60	15·97	13·98	227·70	241·68	1901.
1·39	1·04	131·21	121·90	58·33	50·46	...	51·87	1·27	4·22	12·91	164·44	182·84	7·09	18·10	27·66	36·34	1·21	1·16	1·37	8 73	15·81	13·07	220·38	233·45	1902.
1·08	1·16	124·79	106·18	61·84	50·55	...	51·95	1·23	3·40	11·98	157·50	174·11	7·73	16·27	26·97	36·46	1·06	1·06	1·36	9·28	11·70	12·64	210·64	223·29	1903.
1·23	1·16	128·02	112·20	61·24	48·93	...	50·41	1·37	4·12	12·84	174·68	193·02	7·46	16·92	27·71	37·69	1·26	1·24	1·36	8·83	15·26	13·52	225·79	239·61	Average.
†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	1st half 2nd half } 1903.

* Included with the Great Indian Peninsula railway.
† Information not available.

Appendix 15.
Coaching traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		5′ 6″ gauge—concld.																					
			1899	22,0	68,8	347,0	5,954,9	...	6,392,7	1,22	1,86	2,67	32,93	...	38,48	3,50	42,58	11·37	5·36	3·34	2·50	...	2·67
			1900	29,1	91,4	392,0	6,482,4	...	6,994,9	1,52	2,18	3,10	36,04	...	42,84	1,65	48,08	11·52	5·31	3·37	2·51	...	2·71
			1901	28,9	105,2	507,7	8,122,6	...	8,764,4	1,55	2,43	3,62	43,89	...	51,48	2,10	57,35	11·45	5·24	3·05	2·47	...	2·64
			1902	32,5	114,2	605,8	7,579,8	...	8,332,4	1,83	2,82	4,34	41,46	...	50,45	2,26	57,25	11·50	5·07	3·03	2·43	...	2·62
			* 1903	34,6	116,2	804,7	7,946,4	...	8,901,9	2,07	2,62	5,66	43,88	...	54,43	2,25	61,31	11·81	5·22	3·03	2·44	...	2·65
10	(*a*) to (*c*).	Oudh and Rohilkhand State	Average ...	29,4	99,2	531,5	7,217,2	...	7,877,3	1,64	2,38	3,88	39,64	...	47,54	1,99	53,31	11·53	5·24	3·16	2·47	...	2·66
			1903 1st half	16,7	60,2	381,5	4,030,1	...	4,499,5	1,13	1,48	2,74	23,22	...	28,57	1,13	32,32	11·76	5·10	3·03	2·48	...	2·68
			1903 2nd half	15,9	56,0	423,2	3,916,3	...	4,411,4	94	1,34	2,92	20,66	...	25,86	1,12	28,99	11·86	5·35	2·98	2·41	...	2·62
	*	East Coast State	1899	6,8	22,7	10,0	3,653,5	73,8	3,765,8	52	64	19	18,57	...	18,92	33	21,32	15·94	7·56	4·39	2·48	...	2·60
			1900	7,2	23,8	15,5	4,310,9	72,0	4,459,4	74	74	34	22,22	2	24,06	66	26,17	15·23	6·79	4·47	2·47	...	2·60
		3′ 3½″ gauge.																					
			1899	3,8	8,7	...	1,410,1	...	1,422,6	18	19	...	8,20	...	8,57	24	9,28	15·07	7·73	...	3·00	...	3·10
			1900	3,9	9,2	1,2	1,532,5	...	1,546,8	20	20	1	8,67	...	9,08	25	9,78	15·23	7·62	4·50	3·00	...	3·09
			1901	4,0	10,3	5,1	1,726,9	...	1,746,3	21	23	6	10,31	...	10,81	25	11,54	15·15	7·70	4·50	3·00	...	3·09
			1902	4,5	10,7	5,8	1,742,4	...	1,763,5	24	25	7	9,90	...	10,46	29	11,31	14·74	7·50	4·47	3·00	...	3·11
			1903	5,1	12,5	7,4	1,936,1	...	1,961,1	27	28	8	10,51	...	11,14	33	12,20	15·01	7·52	4·48	3·00	...	3·11
11	(*a*) & (*b*)	Assam-Bengal	Average ...	4,3	10,3	3,9	1,668,4	...	1,686,9	22	28	4	9,52	...	10,01	27	10,82	15·04	7·63	4·49	3·00	...	3·10
			1903 1st half	2,5	6,0	3,6	1,008,8	...	1,020,9	14	13	4	5,54	...	5,85	17	6,39	14·90	7·34	4·49	3·00	...	3·10
			1903 2nd half	2,6	6,5	3,8	927,3	...	940,2	13	15	4	4,97	...	5,29	16	5,81	15·11	7·68	4·47	3·00	...	3·13
			1899	17,5	25,3	65,7	6,916,6	69,7	7,094,8	51	42	45	24,46	1	25,85	51	27,53	17·03	7·87	4·01	2·00	...	2·07
			1900	17,2	23,7	79,7	7,871,8	67,6	8,065,0	46	42	55	28,01	1	29,45	58	31,32	12·67	6·06	3·06	2·00	...	2·06
			1901	18,5	32,0	113,4	9,637,3	1,6	9,801,8	51	51	78	36,14	1	37,95	82	40,16	12·69	5·89	3·04	2·00	3·43	2·06
			1902	24,5	33,2	130,7	9,935,8	1,6	10,125,8	57	57	92	40,46	1	42,53	84	43,32	13·14	5·53	3·05	2·00	4·12	2·06
			1903	17,8	37,7	169,3	11,850,1	1,7	12,076,6	52	62	1,18	48,55	1	49,88	1,13	49,66 ¶	12·24	5·65	2·99	2·00	3·79	2·05
12	(*a*) to (*e*).	Bengal and North-Western.	Average ...	19,1	31,4	111,6	9,242,3	28,4	9,432,8	51	51	78	35,12	1	36,93	78	38,40 ¶	13·55	6·20	3·23	2·00	3·78	2·06
			1903 1st half	9,1	13,6	81,8	5,904,4	9	6,104,8	28	31	57	23,10	...	24,26	57	24,89 ¶	12·50	5·72	3·08	2·00	‡	2·05
			1903 2nd half	8,7	13,1	87,5	5,855,7	8	5,971,8	24	31	61	23,45	1	24,62	56	25,27 ¶	9·51	5·68	2·91	2·00	‡	2·05
			1899	5	1,6	1,6	161,4	...	165,1	2	3	1	40	...	46	5	54	26·27	14·88	4·61	3·00	...	3·30
			1900	6	1,5	1,5	217,9	...	221,5	2	3	1	52	...	58	6	67	27·36	16·20	4·98	3·00	...	3·24
			1901	7	1,9	2,5	311,2	...	316,3	2	3	1	77	...	83	8	95	20·67	16·82	5·00	3·00	...	3·16
			1902	6	2,3	5,5	354,0	...	362,4	2	3	2	89	...	96	6	1,09	28·63	15·88	4·72	3·00	...	3·16
			1903	8	2,9	7,3	431,7	...	442,7	2	4	3	1,07	...	1,16	8	1,33	28·95	15·51	4·62	3·00	...	3·15
13	(*a*) & (*b*)	Bengal Dooars	Average ...	6	2,1	3,7	295,2	...	301,6	2	3	2	73	...	80	7	92	26·38	15·86	4·79	3·00	...	3·20
			1903 1st half	5	1,6	3,6	213,6	...	219,3	1	2	2	54	...	59	4	67	‡	‡	‡	‡	...	‡
			1903 2nd half	3	1,3	3,7	218,1	...	223,4	1	2	4	53	...	57	4	66	‡	‡	‡	‡	...	‡
			1899	7,8	60,2	1,6	1,811,0	2,5	1,883,1	21	74	12	8,90	...	9,97	29	10,68	11·01	5·44	4·00	2·75	...	2·90
			1900	6,7	48,8	42,6	1,722,4	16,1	1,836,6	18	59	39	8,11	1	9,28	31	10,16	11·13	5·44	4·82	2·75	...	2·93
			1901	6,8	46,9	45,2	1,724,4	18,9	1,842,2	19	58	44	8,59	1	9,81	26	10,57	11·24	5·55	4·00	2·75	3·20	2·92
			1902	5,2	40,8	49,0	1,393,9	17,1	1,506,0	15	52	46	7,41	...	8,54	25	9,31	11·26	5·60	4·00	2·75	3·29	2·93
			1903	6,3	46,9	60,3	1,568,5	17,1	1,699,1	18	60	54	8,24	2	9,58	29	10,50	11·31	5·63	4·00	2·75	3·18	2·94
14	(*a*) to (*d*).	Bhavnagar-Gondal-Junagad-Porbandar.	Average ...	6,6	43,7	39,7	1,644,0	14,4	1,753,4	18	61	39	8,25	1	9,44	28	10,24	11·19	5·53	4·16	2·75	3·22	2·92
			1903 1st half	3,0	22,3	29,0	720,1	7,4	852,7	9	30	27	4,20	1	4,87	17	5,37	11·41	5·63	4·00	2·75	‡	2·93
			1903 2nd half	3,3	24,3	30,4	778,4	9,7	846,4	9	30	27	4,04	1	4,71	12	5,13	11·22	5·63	4·00	2·75	‡	2·94
			1899	22,9	163,1	86,7	9,678,4	103,5	10,054,6	1,06	2,01	1,01	36,84	9	41,01	75	43,08	13·83	6·46	3·70	2·66	...	2·82
			1900	22,8	149,7	§	10,576,4	96,9	10,845,8	1,14	2,31	§	45,19	9	48,72	89	51,32	14·35	6·83	§	3·01	...	3·16
			1901	25,3	154,1	§	11,376,0	95,2	11,650,6	1,32	2,58	§	47,03	10	51,03	1,04	53,95	15·01	6·72	§	3·04	3·09	3·20
			1902	25,6	146,6	§	11,882,9	110,4	12,165,5	1,36	2,45	§	49,16	11	53,08	1,22	56,01	16·40	8·56	§	2·99	2·98	3·16
			* 1903	32,8	169,5	§	13,910,1	108,1	14,220,5	1,73	2,81	§	58,77	12	63,43	1,31	66,55	15·61	8·05	§	3·00	2·89	3·15
15	(*a*)	Burma	Average ...	25,9	156,6	...	11,484,8	102,8	11,787,4	1,32	2,43	...	47,40	10	51,45	1,04	54,18	15·04	7·32	...	2·94	2·99	3·10
			1903 1st half	15,1	86,2	...	7,067,4	55,3	7,224,0	89	1,44	...	31,21	6	33,60	59	35,07	15·57	7·93	...	3·01	...	3·17
			1903 2nd half	17,7	83,3	...	6,842,7	52,8	6,996,5	84	1,37	...	27,56	6	29,83	72	31,48	15·48	7·53	...	2·98	...	3·14

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
† Excludes the Bengal Dooars extensions.
¶ Excluding the Cawnpore-Burhwal metre gauge link earnings which in the case of details are included with the Bengal and North-Western and in the case of totals with the Oudh and Rohilkhand State railway.

DIX 15—*contd.*

and portion of 44 in Report for 1902.]

traffic.

paragraphs 17 and 19 of Report.)

Average cost of carrying a passenger one mile in pies.	Average profit from carrying a passenger one mile in pies.	Average distance travelled in miles.						Average number of passengers in a coaching train.					Percentage of freight on capacity hauled.				Average number of vehicles in a coaching train.					Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Year.
		1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.				
1·12	1·55	93·20	86·46	44·30	42·47	...	43·22	1·37	4·00	10·33	169·93	185·64	4·86	11·07	14·85	39·66	1·36	1·36	1·98	7·91	15·22	12·64	225·63	238·28	1899.
1·31	1·40	87·14	86·18	45·15	42·46	...	43·37	1·44	4·45	9·99	155·85	171·74	4·72	13·72	16·84	37·57	1·44	1·17	1·66	7·59	14·46	13·86	219·33	231·19	1900.
1·06	1·58	89·69	84·58	44·87	41·95	...	42·79	1·20	4·10	10·50	157·05	172·85	4·54	13·28	20·16	36·90	1·29	1·15	1·49	7·49	11·42	11·79	214·82	226·61	1901.
1·18	1·44	97·70	93·59	45·39	43·27	...	44·31	1·32	4·64	11·94	142·40	160·30	4·58	16·51	21·33	38·32	1·33	1·12	1·60	6·96	13·66	11·13	217·65	228·78	1902.
1·23	1·42	97·14	89·34	44·61	43·36	...	44·29	1·32	4·07	14·08	135·11	154·58	4·43	15·85	27·89	34·91	1·34	1·15	1·45	7·08	11·02	10·72	221·29	232·01	1903.
1·18	1·48	92·97	88·03	44·86	42·70	...	43·60	1·33	4·25	11·37	152·07	169·02	4·63	14·09	20·21	37·49	1·35	1·19	1·64	7·41	13·16	11·63	219·86	231·49	Average.
0·97	1·71	‡	‡	‡	‡	...	‡	1·54	4·67	14·58	150·60	171·39	4·83	17·53	27·88	39·30	1·41	1·16	1·51	7·25	13·67	11·96	225·52	237·48	1st half } 1903.
1·49	1·13	‡	‡	‡	‡	...	‡	1·12	3·54	13·64	121·48	139·78	3·99	14·26	27·90	31·86	1·28	1·14	1·41	6·92	13·20	9·64	218·69	228·33	2nd half }
1·25	1·35	91·54	56·55	85·60	38·66	...	39·02	1·00	2·59	1·37	231·89	238·85	6·18	10·53	13·42	37·62	1·60	1·62	0·58	10·93	19·25	15·22	279·97	295·19	1899.
1·02	1·58	130·11	70·22	93·90	39·21	...	39·75	1·33	2·98	2·08	247·95	254·35	6·47	10·08	12·32	39·28	1·75	1·81	0·94	11·50	19·20	16·64	284·60	301·25	1900.
1·25	1·85	61·02	54·89	...	37·21	...	36·87	1·27	2·59	...	280·55	284·41	7·43	9·02	...	41·42	1·88	1·84	...	18·99	22·40	18·85	239·72	258·58	1899.
1·37	1·72	63·76	58·22	43·28	36·20	...	36·37	1·23	2·43	0·22	275·49	279·59	7·92	8·95	3·02	43·93	1·74	1·73	0·43	17·37	26·11	18·36	217·38	235·75	1900.
1·80	1·29	66·90	56·13	47·72	38·34	...	38·54	0·88	1·94	0·81	219·78	223·41	7·73	3·33	44·78	1·68	1·61	1·06	13·84	22·44	14·53	189·70	203·23	1901.
2·18	0·93	68·51	58·80	51·87	36·38	...	36·65	0·89	1·81	0·88	181·88	185·46	3·34	4·57	2·35	39·95	1·77	1·65	1·42	12·77	20·79	12·28	188·45	200·73	1902.
2·25	0·86	69·15	56·71	47·69	34·76	...	35·04	0·95	1·93	0·95	182·27	186·10	4·67	9·68	2·76	41·37	1·80	1·73	1·45	12·50	20·90	12·56	192·51	205·07	1903.
1·77	1·33	66·05	56·95	47·64	36·58	...	36·69	1·04	2·14	0·71	227·99	231·79	5·77	7·99	2·86	42·30	1·77	1·71	1·09	15·09	22·53	15·32	205·35	220·67	Average.
2·04	1·06	‡	‡	‡	‡	...	‡	0·94	1·82	0·88	188·45	192·09	4·85	9·60	2·24	43·05	1·71	1·65	1·53	12·51	20·68	12·88	188·93	201·81	1st half } 1903.
2·46	0·67	‡	‡	‡	‡	...	‡	1·01	2·07	1·02	177·80	181·90	4·56	9·62	3·56	39·68	1·95	1·87	1·36	12·59	21·41	12·42	198·65	211·07	2nd half }
0·90	1·17	33·27	41·13	33·65	35·54	...	33·57	0·44	0·78	1·66	177·48	180·37	2·70	3·87	8·91	43·57	1·83	1·37	0·85	13·82	19·99	11·46	137·75	149·22	1899.
0·94	1·12	40·96	46·03	42·97	33·88	...	34·03	0·46	0·87	2·24	176·91	180·49	2·98	4·06	9·66	42·07	1·59	1·37	1·04	14·00	20·10	11·42	139·47	150·89	1900.
0·82	1· 4	41·56	51·66	43·95	36·02	40·00	36·17	0·45	0·96	2·87	202·02	206·30	2·81	4·10	8·36	47·65	1·68	1·54	1·57	14·55	21·50	13·02	147·31	160·33	1901.
0·94	1· 2	34·21	59·19	44·48	39·12	40·00	39·24	0·76	0·84	2·47	165·38	169·95	2·40	3·83	7·28	44·31	1·55	1·49	1·51	12·88	19·56	10·72	139·19	149·81	1902.
0·75	1· 0	46 25	55·48	44·96	37·76	40·00	37·92	0·42	0·95	3·46	203·33	208·16	2·61	4·19	9·41	47·43	1·70	1·50	1·66	14·79	22·09	13·28	158·93	172·16	1903.
0·87	1·19	39·25	50·70	42·00	36·46	40·00	36·19	0·51	0·88	2·54	185·03	188·87	2·70	4·01	8·72	45·01	1·63	1 44	1·33	14·01	20·63	11·97	144·53	156·50	Average.
0·72	1·33	‡	‡	‡	‡	‡	‡	0·39	0·92	3·23	200·51	205·05	2·45	4·39	8·94	43·28	1·69	1·43	1·63	14·12	21·38	12·96	154·10	167·06	1st half } 1903.
0·78	0·27	‡	‡	‡	‡	‡	‡	0·45	0·98	3·69	206·15	211·27	2·78	4·29	9·88	46·58	1·71	1·52	1·70	15·46	22·81	13·51	163·76	177·27	2nd half }
3·78	—0·48	23·80	21·19	23·47	16·03	...	16·16																		1899.
3·48	—0·29	23·69	19·67	21·90	15·35	...	15·45																		1900.
2·88	0·18	16·68	16·43	17·87	15·96	...	15·98																		1901.
‡	‡	17·63	17·32	15·32	16·03	...	16·03																		1902.
‡	‡	17·04	15·54	15·95	15·97	...	15·96																		1903.
3·38	—0·17	19·77	18·03	18·90	15·87	...	15·92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	Average.
‡	‡	‡	‡	‡	‡	...	‡																		1st half } 1903.
‡	‡	‡	‡	‡	‡	...	‡																		2nd half }
1·53	1·37	48·65	42·71	50·88	34·27	...	34·62	1·13	7·78	0·25	186·83	196·00	5·56	22·88	9·33	48·56	1·90	2·53	0·07	12·68	20·63	12·94	139·23	152·17	1899.
1·52	1·41	45·48	42·04	38·08	32·63	...	33·05	0·91	6·20	4·83	169·60	181·55	4·76	19·06	17·68	48·91	1·82	2·44	1·66	11·56	20·91	12·11	136·02	148·13	1900.
1·62	1·30	46·80	42·80	46·29	34·78	4·19	35·00	1·02	6·47	6·70	192·23	206·42	5·28	18·78	30·25	52·34	1·97	2·70	1·59	11·93	21·57	13·54	140·56	154·10	1901.
1·73	1·20	48·80	43·50	45·01	37·12	2·93	37·20	0·86	6·10	7·55	177·36	191·81	4·43	17·15	29·50	47·75	1·97	2·84	1·89	12·08	22·31	12·72	143·72	156·44	1902.
1·40	1·54	48·91	43·50	43·89	38·66	7·81	38·82	1·06	7·03	8·88	197·06	214·03	5·30	21·46	33·97	51·79	1·94	2·33	1·89	13·11	22·98	14·29	145·10	159·39	1903.
1·50	1·36	47·73	42·91	44·63	35·49	4·98	35·34	1·00	6·72	5·64	184·60	197·96	5·07	19·87	24·15	49·87	1·92	2·57	1·42	13·27	21·68	13·12	140·93	154·05	Average.
1·26	1·67	‡	‡	‡	‡	‡	‡	1·12	7·65	9·66	218·17	236·60	4·95	21·12	25·21	55·31	2 20	2·63	1·94	13·61	24·35	15·88	151·68	167·56	1st half } 1903.
1·55	1·39	‡	‡	‡	‡	‡	‡	1·00	6·50	8·21	179·03	194·74	5·68	21·81	32·80	48·57	1·74	2·08	1·85	12·68	21·81	12·93	139·49	152·42	2nd half }
1·29	1·53	48·92	25·84	60·75	27·59	...	27·90	1·13	4·72	7·15	203·55	213·39	7·47	12·88	23·85	49·02	1·82	2·67	1·32	14·31	22·87	13·64	159·19	172·83	1899.
1·29	1·87	54·46	30·98		27·15	...	27·31	1·14	4·99	3·98	215·09	221·23	7·59	14·61	15·51	48·88	1·86	2·58	1·12	15·07	22·45	16·18	149·03	165·22	1900.
1·41	1·79	66·58	47·72		26·10	6·82	26·31	1·29	5·71	§	219·49	226·49	8·97	21·30	§	46·79	1·79	2·35	§	15·68	22·53	16·83	162·78	179·61	1901.
1·48	1·68	62·16	37·54		26·49	6·41	26·52	1·06	3·88	§	206·39	211·33	9·90	18·20	§	38·92	1·60	2·05	§	14·68	20·76	13·83	175·93	189·77	1902.
1·49	1·66	64·90	39·48		27·06	7·52	27·15	1·17	3·87	§	203·79	208·83	10·36	16·15	§	40·32	1·59	1·87	§	13·89	19·79	13·56	178·37	191·86	1903.
1·39	1·71	59·45	36·31	...	26·88	6·92	27·04	1·16	4·63	5·56	209·66	216·25	8·86	16·63	19·68	46·59	1·71	2·30	1·22	14·72	21·68	14·80	165·06	179·86	Average.
1·27	1·90	‡	‡	...	‡	‡	‡	1·25	4·00	...	222·89	228·14	13·44	20·95	...	56·02	1·51	1·90	...	13·47	19·86	14·54	174·51	189·05	1st half } 1903.
1·73	1·41	‡	‡	...	‡	‡	‡	1·10	3·75	...	185·95	190·80	8·33	13·16	...	43·50	1·49	1·84	...	14·11	19·74	12·53	181·96	194·49	2nd half }

‡ Information not available.
§ Intermediate class abolished.

Appendix 15.
Coaching traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		3′ 3½″ gauge—*contd.*																					
			1899	1,0	...	...	222,0	...	223,0	...	...	...	29	...	29	...	29	20·04	...	...	5·11	...	5·18
			1900	1,0	...	...	231,0	...	232,0	...	...	...	30	...	30	...	31	20·04	...	...	4·27	...	5·34
			1901	2,2	...	...	326,7	...	328,9	...	...	...	42	...	42	...	43	*	...	...	*	...	5·62
			1902	2	...	...	184,8	...	185,0	...	...	...	26	...	26	...	26	*	...	...	*	...	*
			1903	1,2	...	2,8	258,3	...	262,3	1	...	1	35	...	37	...	37	24·00	...	12·00	6·00	...	...
16	(a)	Deoghur . .	Average ...	1,1	...	5	244,6	...	246,2	...	...	...	33	...	33	...	33	21·35	...	12·00	5·13	...	5·14
			1903 { 1st half	4	...	6	106,2	...	107,2	...	...	...	13	...	14	...	14	...	...	...	...	...	...
			1903 { 2nd half	8	...	2,2	152,1	...	155,1	1	...	1	22	...	23	...	23	...	...	...	...	...	...
			1899	4,3	2,9	...	236,7	...	243,9	11	4	...	1,01	...	1,16	7	1,39	21·92	11·28	...	4·00	...	4·86
			1900	3,8	2,9	...	272,3	...	279,0	10	4	...	1,15	...	1,29	8	1,51	22·18	11·31	...	4·00	...	4·35
			1901	4,1	3,0	...	282,8	...	289,9	9	4	...	1,04	...	1,17	8	1,38	22·10	11·38	..	4·00	...	4·38
			1902	4,0	3,0	...	295,3	...	302,3	9	4	...	1,09	...	1,22	8	1,43	21·96	11·38	...	4·00	...	4·35
			1903	3,8	3,0	...	292,2	...	299,0	9	4	...	1,07	...	1,20	8	1,42	21·72	11·47	...	3·94	...	4·29
17	(a) and (b).	Dibru-Sadiya .	Average ...	4,0	3,0	...	275,9	...	282,8	10	4	...	1,07	...	1,21	8	1,43	21·98	11·36	...	3·99	...	4·45
			1903 { 1st half	2,0	1,5	...	149,0	...	152,5	5	2	...	57	...	64	4	74	...	...	...	...	...	...
			1903 { 2nd half	1,8	1,5	...	143,2	...	146,5	4	2	...	50	...	56	4	68	...	...	...	...	...	...
			1899	†	†	†	†	†	†	56	87	1,42	18,08	5	20,98	‡2	23,43	†	†	†	†	†	†
			1900	†	†	†	†	†	†	58	87	1,61	22,08	5	25,19	‡3	28,05	†	†	†	†	†	†
			1901	†	†	†	†	†	†	60	97	1,77	22·02	6	25,42	1,51	28.30	†	†	†	†	†	†
			1902	†	†	†	†	†	†	64	93	1,87	23,91	6	26 81	1,77	30,08	†	†	†	†	†	†
			1903	†	†	†	†	†	†	73	1,09	2,19	25,54	6	29,61	2,14	33,34	†	†	†	†	†	†
4	(b) to (e).	Eastern Bengal State.	Average ...	†	†	†	†	†	†	62	96	1,77	22,20	6	25,60	1,09	28,64	†	†	†	†	†	†
			1903 { 1st half	†	†	†	†	†	†	36	54	92	12,41	3	14,26	85	15,76	13·80	6·45	3·12	2·50	...	2·65
			1903 { 2nd half	†	†	†	†	†	†	37	55	1,27	13,13	3	15,35	1,29	17,58	13·77	6·10	3·03	2·50	...	2·65
			1899	1	7	...	17,9	...	18,7	...	1	...	8	...	9	...	10	...	...	...	...	...	2·28
			1900	2,2	12,6	...	573,4	1	588,3	9	20	...	2,88	...	3,17	7	3,45	11·56	5·06	...	2·00	...	2·13
			1901	3,6	22,6	...	1,145,0	5,3	1,176,5	21	49	...	6,44	8	7,22	25	7,83	11·29	4·76	...	2·00	6·66	2·15
			1902	4,2	27,2	...	1,188,9	4,0	1,216,3	24	55	...	6,62	6	7,47	40	8,62	10·87	4·57	...	2·00	3 08	2·15
			1903	3,2	25,7	...	1,150,1	4,9	1,183,0	19	60	...	6,10	5	6,84	43	7,66	11·22	4·87	...	2·00	2·81	2·14
8	(c)	Hyderabad-Godavari valley.	Average ...	2,7	17,8	...	813,5	2,7	836,6	15	35	...	4,42	4	4,96	1	5,53	11·24	4·81	...	2·00	4·15	2·17
			1903 { 1st half	1,7	13,3	...	573,7	2,4	591,1	10	26	...	3,08	3	3,47	17	3,97	10·30	4·56	...	2·00	...	2·15
			1903 { 2nd half	1,5	12,4	...	576,4	1,6	591,9	9	24	...	3,02	2	3,37	16	3,69	10·81	4·53	...	2·00	...	2·14
			1899	1,2	8,9	...	869,1	...	877,2	9	15	...	4,93	...	5,17	19	5,78	18·00	6·00	...	2·00	...	2·07
			1900	1,0	7,1	...	778,5	...	786,6	7	15	...	4,34	...	4,56	27	5,14	18·00	6·00	...	2·00	...	2·07
			1901	2,7	16,8	...	1,447,6	...	1,467,1	20	42	...	7,79	...	8,41	35	9,34	14·40	5·96	...	2 05	...	2·16
			1902	3,1	16,8	...	1,358,1	...	1,378,0	22	44	...	7,90	...	8,56	43	9,82	14·23	6·00	...	2·06	...	2·18
			1903	3,9	19,8	...	1,536,4	...	1,560,1	28	47	...	8,65	...	9,40	54	10,71	13·64	6·07	...	2·06	...	2·19
18	(a) to (c).	Jodhpur-Bikaner.	Average ...	2,4	13,5	...	1,197,9	...	1,213,8	17	33	...	6,72	...	7,22	36	8,16	15·65	6·01	..	2·03	...	2·13
			1903 { 1st half	1,8	9,3	...	782,9	...	794,0	15	24	...	4,52	...	4,91	28	5,65	14·07	6·00	...	2·05	...	2·15
			1903 { 2nd half	2,1	10,5	...	753,5	...	766,1	13	23	...	4,13	...	4,49	26	5,06	13·10	6·00	...	2·06	...	2·19
			1899	20,5	82,7	259,5	10,829,6	5,3	11,197,6	1,33	2,22	2,77	54,73	2	61,07	4,20	68,81	13·52	6·09	2·98	2·00	...	2·13
			1900	20,8	75,3	275,3	10,736,7	4,8	11,112,9	1,20	2,03	2,92	52,55	2	58,72	4,50	66,63	13·34	6·33	2·98	2 00	...	2·12
			1901	19,6	87,9	308,4	12,451,8	6,0	12,873,7	1,32	2,47	3,18	61,56	2	68,55	4,34	76,65	13·35	5·91	2·98	2·00	1·99	2·12
			1902	23,4	91,0	288,0	11,683,3	5,3	12,091,0	1,71	2,51	3,03	56,99	1	64,25	4,33	73,96	13·65	6·31	2·99	2·00	1·99	2·14
			1903	25,7	93,2	280,0	12,040,8	6,9	12,446,6	1,89	2,56	3,07	59,88	2	67,42	4,47	76,54	14·11	6·26	2·99	2·00	1·89	2·14
3	(b) and (g) to (l).	Rajputana-Malwa.	Average ...	22,0	86,0	282,2	11,548,4	5,7	11,944,4	1,49	2,36	2,99	57,14	2	64,00	4,47	72,52	13·59	6·18	2·98	2·00	1·93	2·13
			1903 { 1st half	14,3	47,1	147,4	6,129,5	3,8	6,342,1	1,18	1,34	1,59	29,90	1	34,02	2,26	39,39	14·15	6·22	2·99	2·01	...	2·17
			1903 { 2nd half	11,4	46,1	132,6	5,911,3	3,1	6,104,5	71	1,32	1,48	29,98	1	33,40	2,21	37,15	13·34	6·24	2·99	2·01	..	2·14

* Information not furnished.
† Included with the Eastern Bengal State railway (5′ 6″ gauge).
‡ Excluding the parcel earnings of the Eastern Bengal State 3′ 3½″ gauge railway which are included with the 5′ 6″ gauge.
** Excluding the Cooch Behar State railway.

DIX 15—*contd.*

and portion of 44 in Report for 1902.]

traffic.

graphs 17 and 19 of Report.)

Average cost of carrying a passenger one mile in pies.	Average profit from carrying a passenger one mile in pies.	Average distance travelled in miles: 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Average number of passengers in a coaching train: 1st class.	2nd class.	Intermediate class.	3rd class.	Total.	Percentage of freight on capacity hauled: 1st class.	2nd class.	Intermediate class.	3rd class.	Average number of vehicles in a coaching train: 1st class.	2nd class.	Intermediate class.	3rd class.	Total.	Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Year.
*	*	4·79	...	...	4·79	...	4·79																		1899.
*	*	4·79	...	...	4·79	...	4·79																		1900.
3·54	2·08	4·79	...	...	4·79	...	4·79																		1901.
*	*	4·79	...	...	4·79	...	4·79																		1902.
...	...	...	...	...	...	...	...																		1903.
...	...	4·79	...	...	4·79	...	4·79	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	Average.
...	...	...	...	...	...	...	...																		1st half 1903.
...	...	...	...	...	...	...	...																		2nd half 1903.
†13·00	††1·86	21·39	23·17	...	22·55	...	20·59																		1899.
2·52	1·83	21·86	22·30	...	20·30	...	20·34																		1900.
3·00	1·38	19·92	20·86	...	17·63	...	17·70																		1901.
*	*	19·63	21·04	...	17·69	...	17·74																		1902.
		20·74	21·34	...	17·84	...	17·92																		1903.
2·84	1·69	20·71	21·74	...	19·20	...	18·86	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	Average.
...	...	...	...	...	...	...	...																		1st half 1903.
...	...	...	...	...	...	...	...																		2nd half 1903.
...	...	†	†	†	†	†	†	0·93	3·28	10·62	164·49	179·32	5·73	19·02	23·64	44·87	1·49	1·46	2·58	11·84	20·49	12·06	131·99	144·05	1899.
...	...	†	†	†	†	†	†	0·94	3·01	11·34	193·04	206·34	5·25	17·92	23·63	51·35	1·58	1·42	2·75	12·08	20·76	13·26	148·66	161·92	1900.
...	...	†	†	†	†	†	†	0·84	3·01	11·87	170·23	185·95	5·63	21·41	29·55	51·37	1·22	1·18	2·26	10·61	17·82	13·35	131·75	144·10	1901.
0·96	1·68	†	†	†	†	†	†	0·85	2·70	11·05	169·77	184·37	6·16	19·14	29·21	57·20	1·29	1·21	2·13	9·52	16·56	12·25	118·23	130·98	1902.
1·01	1·64	†	†	†	†	†	†	0·92	3·05	12·52	177·90	194·39	5·91	19·93	28·34	53·58	1·42	1·27	2·33	10·58	18·11	13·11	131·20	144·31	1903.
0·98	1·66	†	†	†	†	†	†	0·90	3·01	11·48	175·09	190·07	5·74	19·49	26·97	51·67	1·40	1·31	2·41	10·93	18·78	12·60	132·47	145·07	Average.
1·15	1·50	*	*	*	*	*	*	0·91	2·97	10·55	175·18	189·61	5·49	17·51	23·52	51·11	1·48	1·40	2·38	10·93	18·78	12·58	134·43	147·01	1st half 1903.
0·87	1·78	*	*	*	*	*	*	0·94	3·13	14·44	180·55	199·06	6·36	22·84	33·19	56·15	1·35	1·14	2·28	10·24	17·46	13·61	128·06	141·67	2nd half 1903.
1·44	0·84	...	...	...	...	...	43·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1899.
1·32	0·81	68·47	64·73	...	48·22	...	48·82	1·12	5·86	...	208·54	215·52	3·06	13·02	...	48·90	2·09	2·03	...	9·22	16·62	13·69	186·06	199·69	1900.
1·27	0·88	99·36	68·98	...	54·01	44·74	54·74	0·68	4·10	...	108·56	113·33	3·44	16·24	...	43·18	1·08	1·08	...	5·35	9·10	7·30	117·54	124·89	1901.
1·40	0·75	99·90	85·69	...	53·85	94·33	50·43	1·46	8·14	...	195·78	205·30	3·77	18·27	...	43·93	1·11	1·06	...	5·48	9·38	7·91	102·91	119·82	1902.
1·58	0·57	98·89	76·04	...	50·95	91·51	51·77	1·07	6·80	...	174·84	182·71	2·86	15·71	...	40·80	1·13	1·09	...	5·65	9·38	7·32	103·64	113·96	1903.
1·40	0·77	91·65	73·86	...	51·76	76·85	49·83	1·08	4·48	...	171·91	179·21	3·43	15·81	...	44·23	1·35	1·32	...	6·42	11·12	9·05	128·28	137·34	Average.
1·27	0·83	*	*	...	*	*	*	1·24	7·24	...	181·33	189·81	3·28	15·75	...	45·11	1·12	1·11	...	5·07	8·84	7·54	100·43	107·97	1st half 1903.
2·00	0·14	*	*	...	*	*	*	0·91	6·37	...	168·66	175·94	2·45	15·67	...	37·33	1·14	1·07	...	6·24	9·93	7·10	112·97	120·07	2nd half 1903.
0·84	1·23	80·32	69·76	...	54·47	...	54·63	0·93	4·23	...	410·06	415·23	8·72	32·94	...	100·06	1·89	2·16	...	24·80	35·44	28·13	287·32	315·45	1899.
0·96	1·09	78·88	66·80	...	53·58	...	53·73	0·79	4·06	...	357·68	362·54	6·43	32·77	...	91·13	2·07	2·20	...	24·06	34·73	23·72	277·72	301·44	1900.
1·22	0·94	96·00	80·00	...	50·00	...	51·00	0·70	3·64	...	196·96	201·30	4·69	20·99	...	46·20	1·23	1·37	...	12·55	19·12	13·52	162·45	175·97	1901.
1·23	0·94	95·90	82·25	...	54·30	...	54·74	0·69	3·26	...	171·98	175·93	5·31	17·52	...	40·85	1·96	1·48	...	12·45	20·18	12·24	159·57	171·81	1902.
1·14	1·03	100·00	75·00	...	53·00	...	52·00	0·89	3·38	...	183·93	188·26	6·09	17·52	...	43·63	1·63	1·55	...	13·04	26·31	12·92	166·96	179·88	1903.
1·03	1·05	90·22	74·76	...	53·07	...	53·20	0·80	3·71	...	264·12	268·64	6·25	24·35	...	64·39	1·65	1·75	...	17·38	27·16	18·11	210·80	228·91	Average
0·99	1·26	*	*	...	*	...	*	1·00	3·72	...	208·76	213·48	6·32	18·02	...	45·81	1·73	1·65	...	14·08	22·92	14·91	176·58	191·49	1st half 1903.
1·39	0·80	*	*	...	*	...	*	0·78	3·04	...	159·10	162·92	5·27	17·02	...	41·45	1·54	1·44	...	12·01	19·69	10·92	157·34	168·26	2nd half 1903.
§0·78	§1·35	92·36	84·13	68·78	48·44	...	49·31	0·87	3·20	8·29	242·22	254·59	5·06	16·33	31·52	50·05	1·63	1·53	1·02	15·00	23·51	17·75	145·81	163·57	1899.
0·87	1·25	84·47	81·68	68·17	46·95	...	47·78	0·79	2·73	8·50	223·96	235·99	4·75	14·31	34·16	44·70	1·57	1·46	0·93	15·14	23·15	16·52	145·30	161·82	1900.
0·79	1·33	97·15	91·14	66·53	47·49	32·37	48·31	0·85	3·58	9·38	266·02	279·83	5·17	19·77	47·46	50·13	1·57	1·50	0·79	16·34	24·26	19·22	150·18	69·40	1901.
0·95	1·19	103·01	84·08	67·53	46·83	28·34	47·70	1·06	3·34	8·58	239·55	252·53	6·23	17·67	39·25	46·64	1·65	1·57	0·87	15·77	23·97	17·84	158·88	177·72	1902.
1·13	1·02	99·89	84·22	70·47	47·78	28·95	48·66	1·02	3·18	9·44	224·82	238·46	6·34	17·39	46·37	46·26	1·59	1·53	0·81	15·10	22·92	16·63	167·66	184·29	1903.
0·90	1·23	95·37	85·05	68·30	47·50	29·59	48·35	0·92	3·21	8·84	239·31	252·28	5·51	17·09	39·71	47·36	1·60	1·52	0·81	15·47	23·56	17·59	153·77	171·36	Average.
1·02	1·15	*	*	*	*	*	*	1·36	3·60	10·46	241·90	257·32	7·53	18·08	46·17	47·23	1·78	1·66	0·90	15·53	24·09	18·14	178·71	196·85	1st half 1903.
1·27	0·87	*	*	*	*	*	*	0·73	2·82	8·56	209·99	222·10	5·05	16·63	46·18	43·51	1·42	1·41	0·74	14·73	21·91	15·31	158·09	173·39	2nd half 1903.

§ Excludes the Godhra-Rutlam-Nagda (5′ 6″ gauge) railway.
†† Dibru-Sadiya railway only.

Appendix 15.
Coaching traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coachings traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		3'3½" gauge—concld.																					
			1899	4,6	15,9	11,7	1,139,7	...	1,171,9	33	59	10	4,42	...	5,44	23	6,23	26·64	11·17	4·01	2·20	...	2·59
			1900	4,6	15,9	11,5	1,186,0	...	1,218,0	32	56	10	4,59	...	5,57	24	6,39	26·37	9·82	3·75	2·18	...	2·53
			1901	5,5	19,4	14,0	1,500,2	...	1,539,1	40	65	12	5,76	...	6,93	26	7,83	26·47	7·79	4·00	2·19	...	2·52
			1902	5,5	21,4	15,1	1,550,3	...	1,592,3	40	73	13	5,76	...	7,02	29	7,93	26·32	7·28	4·00	2·19	...	2·53
			1903	5,3	18,5	13,4	1,509,1	...	1,546,4	40	66	11	5,54	...	6,71	30	7,66	27·00	8·89	4·00	2·19	...	2·54
19	(*a*) & (*b*).	Rohilkund and Kumaon.	Average ...	5,1	18,2	13,1	1,377,1	...	1,413,5	37	64	11	5,21	...	6,33	26	7,21	26·56	8·99	3·95	2·19	...	2·54
			1903 1st half	2,5	8,3	6,9	790,7	...	808,4	19	29	6	2,93	...	3,47	12	3,88	26·27	8·79	4·00	2·19	...	2·48
			1903 2nd half	2,8	10,3	6,5	718,4	...	738,0	21	37	5	2,61	...	3,24	18	3,78	27·68	8·97	4·01	2·20	...	2·60
			1899	1,5	2,9	...	45,1	5	50,0	11	9	...	19	...	39	4	49	76·00	38·00	...	7·42	...	13·37
			1900	3,2	5,7	...	73,3	1,2	83,4	28	22	...	34	...	84	7	1,14	76·00	38·00	...	7·50	...	15·10
			1901	3,3	5,9	...	65,8	1,2	76,2	27	27	...	40	...	94	8	1,31	76·00	38·00	...	7·00	1·90	13·71
			1902	3,8	10,9	...	322,2	2,0	338,9	31	34	...	1,27	...	1,92	13	2,39	74·85	26·54	...	3·42	1·49	‡4·94
			1903	4,8	18,3	...	665,1	6,7	694,9	34	40	...	2,36	...	3,10	12	3,57	59·23	17·02	...	2·91	0·66	‡3·66
7	(*d*) & (*e*).	Shoranur-Cochin and Nilgiri.	Average ...	3,3	8,7	...	234,3	2,3	248,7	26	26	...	91	...	1,44	9	1,78	72·42	31·51	...	5·65	1·42	10·16
			1903 1st half	2,8	9,0	...	359,8	2,7	374,3	22	20	...	1,28	...	1,69	6	1,95	*	*	...	*	*	*
			1903 2nd half	2,0	9,3	...	305,3	4,0	320,6	12	20	...	1,08	...	1,41	6	1,62						
			1899	16,8	93,5	...	12,4 9,1	196,8	12,756,2	77	1,52	...	39,55	9	41,93	1,17	44,69	11·65	5·85	...	2·00	...	2·07
			1900	16,7	91,2	...	13,002,8	261,1	13,371,8	81	1,53	...	45,25	14	47,73	1,36	50,59	11·62	5·11	...	2·00	...	2·07
			1901	18,1	100,0	...	13,591,8	325,2	14,035,1	88	1,71	...	48,96	15	51,70	1,49	54,26	11·81	5·90	...	2·05	0·58	2·11
			1902	20,4	114,2	...	14,911,7	341,0	15,387,3	1,04	1,84	...	53,32	15	56,35	1,67	59,69	11·89	5·91	...	2 05	0·54	2·12
			1903	22,5	137,5	...	17,391,4	326,4	17,877,8	1,22	2,30	...	61,73	12	65,97	1,84	69,05	11·94	6·00	...	2·05	1·32	2·13
20	(*a*) to (*e*).	South Indian ...	Average ...	18,9	107,3	...	14,269,4	290,1	14,685,6	94	1,78	...	49,76	13	52,62	1,51	55,65	11·78	5·75	...	2·03	0·81	2·10
			1903 1st half	10,7	66,4	...	8,530,3	154,7	8,762,1	65	1,12	...	30,42	6	32,25	95	34,16	11·83	5·89	...	2·05	...	2·14
			1903 2nd half	11,8	71,1	...	8,861,1	171,7	9,115,7	57	1,18	...	31,31	6	33,12	89	34,89	11·73	5·91	...	2·05	...	2·13
			1899	15,6	69,9	...	3,157,6	10,0	3,252,5	82	1,46	...	14,27	1	16,56	1,54	19,85	11·33	5·32	...	2·00	...	2·21
			1900	17,6	68,2	...	5,291,5	13,7	5,390,4	94	1,52	...	22,69	1	25,16	1,54	29,03	11·27	5·36	...	2·00	...	2·15
			1901	15,8	58,5	...	5,836,1	17,0	5,927,4	91	1,33	...	24,77	2	27,03	1,71	30,93	11·27	5·08	...	2·03	1·07	2·16
			1902	18,6	77,6	...	6,282,0	18,8	6,397,0	1,16	1,73	...	27,24	2	30,15	2,25	35,21	12·06	5·12	...	2·10	1·04	2·24
			1903	17,7	74,9	...	6,588,4	16,9	6,697,9	1,33	1,78	...	27,91	2	31,04	2,10	35,84	15·55	6·11	...	2·09	0·96	2·26
21	(*a*) to (*g*).	Southern Mahratta.	Average ...	16,9	69,8	...	5,431,0	15,3	5,533,0	1,03	1,56	...	23,38	2	25,99	1,89	30,17	12·30	5·40	...	2·04	1·02	2·20
			1903 1st half	9,4	40,0	...	3,369,2	9,3	3,427,9	70	94	...	14,37	1	16,02	1,00	18,47	14·03	6·09	...	2·09	...	2·26
			1903 2nd half	8,3	34,9	...	3,219,2	7,6	3,270,0	63	84	...	13,64	1	15,02	1,10	17,37	15·40	6·08	...	2·10	...	2·26
			1899	8	1,3	1,9	185,8	4	190,2	3	3	2	83	...	91	2	98	18·00	9·00	3·00	2·00	...	2·12
			1900	4	1,1	2,4	165,4	5	169,8	3	3	2	74	...	82	3	90	17·86	9·00	3·00	2·00	...	2·13
			1901	5	1,3	2,5	184,8	...	189,1	3	3	2	87	...	95	3	1,04	17·99	9·00	3·00	1·99	...	2·12
			1902	5	1,5	2,9	173,8	5	178,7	3	4	2	86	...	95	3	1,03	17·81	8·99	2·99	1·99	...	2·13
			1903	7	1,9	3,2	183,9	4	190,1	4	5	3	86	...	98	3	1,09	17·88	8·98	3·00	1·99	...	2·18
22	(*a*)	Udaipur-Chitor	Average ...	6	1,4	2,6	178,6	4	183,6	3	4	2	83	...	92	3	1,01	17·93	8·97	3·00	1·99	...	2·14
			1903 1st half	4	1,0	1,3	95,8	2	98,7	3	3	1	45	...	52	2	57	17·81	8·99	3·00	1·99	...	2·19
			1903 2nd half	3	9	1,9	88,1	2	91,4	1	2	2	41	...	46	1	52	17·99	8·98	3·00	1·99	...	2·16
			1899	1,9	11,0	...	209,0	...	221,9	2	5	...	39	...	46	*	52	12·00	6·00	...	2·50	...	2·76
			1900	1,7	12,5	...	229,3	...	243,5	2	6	...	41	...	49	*	57	12·00	6·00	...	2·50	...	2·78
21	(*h*)	West of India Portuguese. †	1901	1,8	11,1	...	237,6	...	250,5	2	5	...	43	...	50	3	56	12·00	6·00	...	2·50	...	2·76

* Information not available.
† Included with the Southern Mahratta railway after 1901.
‡ Difference in rates as compared with previous years is due to the inclusion of the transactions of the Shoranur-Cochin railway from 1902.

DIX 15—*contd.*

and portion of 44 in Report for 1902.]

traffic.

graphs 17 and 19 of Report.)

Average cost of carrying a passenger one mile in pies.	Average profit from carrying a passenger one mile in pies.	Average distance travelled in miles.						Average number of passengers in a coaching train.					Percentage of freight on capacity hauled.					Average number of vehicles in a coaching train.					Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Year.
		1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.	1st class.	2nd class.	Intermediate class.	3rd class.	Total.				
1·08	1·51	52·74	63·57	39·41	33·88	...	34·42	1·48	6·13	2·78	223·66	244·06	5·05	24·82	11·27	38·44		2·44	2·07	1·42	19·67	28·86	16·28	183·37	199·55	1899.
1·02	1·51	50·02	69·51	40·54	34·64	...	34·64	1·28	6·19	2·60	226·23	236·30	4·98	28·24	9·28	69·01		2·14	1·83	1·31	17·38	25·68	15·75	171·31	188·06	1900.
1·06	1·46	52·38	83·25	40·13	33·56	...	34·31	1·02	5·77	2·02	180·92	189·73	5·69	41·36	11·98	46·17		1·51	1·35	0·74	11·53	17·73	12·53	122·95	135·48	1901.
1·08	1·45	52·64	89·74	40·48	32·52	...	33·43	0·97	6·42	2·06	170·63	180·08	5·64	40·64	12·81	43·35		1·44	0·82	0·74	11·81	17·86	11·89	120·91	132·80	1902.
1·15	1·40	54·19	76·83	40·36	32·13	...	32·81	0·94	4·65	1·76	158·66	166·01	5·91	29·58	11·01	40·27		1·31	1·31	0·79	11·96	17·64	11·01	123·94	134·95	1903.
1·08	1·47	52·27	76·58	40·18	33·35	...	33·92	1·24	5·83	2·24	194·02	203·24	5·45	32·93	11·27	47·45		1·77	1·48	1·00	14·47	21·55	13·40	144·58	158·17	Average.
0·97	1·51	*	*	*	*	...	*	0·94	4·22	1·91	173·66	180·73	5·99	27·10	10·75	42·77		1·30	1·30	0·84	12·39	18·08	11·35	124·04	135·89	1st half } 1903.
1·31	1·29	*	*	*	*	...	*	0·93	5·08	1·61	143·67	151·29	5·83	32·06	11·27	37·77		1·33	1·32	0·74	11·53	17·21	10·18	123·85	134·03	2nd half }
...	...	16·85	16·13	...	10·97	...	11·52	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	1899.
...	...	16·69	16·28	...	11·84	...	12·75																			1900.
7·89	5·82	16·65	16·18	...	16·72	12·70	16·61	2·79	5·41	...	45·03	53·23	17·16	110·02	...	63·64		0·59	0·15	...	1·33	2·07	4·22	59·62	63·30	1901.
3·14	1·80	21·06	22·62	...	22·13	11·27	22·07	1·74	5·34	...	155·23	162·31	16·19	93·74	...	59·61		0·49	0·30	...	3·95	6·39	10·69	108·21	118·90	1902.
1·92	1·74	23·16	24·41	...	23·40	19·98	23·39	1·55	6·34	...	219·82	227·71	11·43	65·97	...	51·44		0·77	0·62	...	6·37	9·50	14·61	145·09	159·70	1903.
2·59	1·87	18·88	19·12	...	17·01	14·65	17·27	2·03	5·70	...	140·03	147·75	14·93	89·91	...	58·23		0·62	0·36	...	3·88	5·99	9·86	104·11	113·97	Average.
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	1st half } 1903.
																										2nd half }
0·94	1·13	54·05	47·51	...	30·19	...	30·37	0·75	2·94	...	222·91	226·60	7·90	16·70	...	51·38		1·10	1·45	...	13·94	19·01	14·21	137·43	151·64	1899.
0·92	1·15	51·11	55·16	...	32·89	...	33·10	0·76	3·19	...	239·73	243·98	8·33	19·93	...	54·26		1·06	1·32	...	13·98	18·75	15·81	141·71	157·03	1900.
0·82	1·29	79·00	55·65	...	33·69	15·29	33·47	0·85	3·51	...	262·93	267·29	8·72	20·47	...	58·84		1·11	1·36	...	14·37	19·38	16·81	145·77	162·58	1901.
0·83	1·29	82·43	52·46	...	33·42	16·13	33·25	0·95	3·57	...	273·05	277·57	9·34	24·01	...	62·09		1·10	1·32	...	14·03	18·96	17·47	143·14	160·61	1902
0·69	1·44	86·74	53·49	...	33·17	5·29	32·89	1·03	3·84	...	297·76	302·63	9·65	26·11	...	64·01		1·11	1·35	...	14·68	19·83	16·95	148·93	167·88	1903.
0·84	1·26	70·67	52·85	...	32·67	12·24	32·62	0·87	3·41	...	259·14	263·41	8·79	21·26	...	58·25		1·10	1·36	...	14·20	19·19	16·55	143·40	159·95	Average.
0·65	1·49	*	*	...	*	*	*	1·12	3·82	...	300·64	305·58	10·24	25·34	...	65·31		1·14	1·38	...	14·50	19·76	19·13	149·09	167·18	1st half } 1903.
0·73	1·40	*	*	...	*	*	*	0·49	3·87	...	295·01	299·82	9·06	28·88	...	62·80		1·09	1·32	...	14·85	19·39	19·28	149·77	168·85	2nd half }
1·45	0·76	88·57	75·33	...	43·30	...	44·21	1·73	6·59	...	171·27	180·10	13·76	30·04	...	41·85		1·56	1·76	...	12·87	19·53	12·77	149·74	162·52	1899.
1·27	0·87	93·96	79·67	...	41·10	...	41·75	1·40	4·81	...	190·47	196·63	13·72	25·04	...	44·32		1·26	1·51	...	13·41	19·11	13·41	146·64	160·05	1900.
1·50	0·66	98·03	86·47	...	40·06	19·04	40·62	1·14	3·78	...	172·63	177·55	11·77	33·01	...	43·33		1·21	1·32	...	12·30	17·63	12·01	141·42	153·43	1901.
1·41	0·63	99·25	83·58	...	39·70	17·45	40·34	1·30	4·49	...	171·26	177·05	10·09	22·11	...	43·08		1·57	1·63	...	12·32	15·52	12·24	146·61	158·85	1902.
1·35	0·91	92·67	74·51	...	38·84	21·09	39·34	1·22	3·94	...	179·71	184·87	8·85	19·07	...	44·09		1·70	2·67	...	12·89	19·03	12·67	150·43	163·10	1903.
1·40	0·81	94·50	79·91	...	40·60	19·19	41·25	1·36	4·72	...	177·16	183·24	11·64	23·85	...	43·38		1·46	1·58	...	12·72	18·16	12·62	146·97	159·59	Average.
1·27	0·99	*	*	...	*	*	*	1·34	4·13	...	184·16	189·63	9·85	19·60	...	45·10		1·67	1·70	...	12·67	19·00	12·99	150·36	163·35	1st half } 1903.
1·44	0·82	*	*	...	*	*	*	1·11	3·74	...	175·21	180·06	7·88	18·52	...	43·06		1·72	1·64	...	12·70	19·06	12·34	150·51	162·85	2nd half }
1·35	0·77	36·82	51·55	51·34	42·84	...	42·96	1·05	2·39	3·48	284·45	291·38	7·06	18·57	8·11	62·04		1·23	1·07	1·79	16·01	23·77	19·79	187·76	207·55	1899.
1·35	0·78	60·14	57·32	56·04	43·00	...	43·28	1·27	2·62	5·18	305·05	314·15	7·15	18·72	9·98	52·96		1·45	1·23	2·21	19·92	29·36	20·36	223·78	243·14	1900.
1·54	0·58	56·08	57·32	51·46	45·44	...	45·63	0·98	2·70	4·67	302·96	311·31	6·50	17·33	10·26	62·26		1·21	1·29	1·90	16·77	21·12	20·23	196·62	216·90	1901.
1·50	0·63	60·06	57·75	50·48	47·47	...	48·98	1·03	2·87	4·95	286·32	295·18	6·73	18·03	11·01	65·25		1·25	1·32	1·93	25·17	23·57	19·68	187·67	207·35	1902.
1·65	0·52	62·20	52·75	53·69	45·30	...	45·47	1·36	2·86	4·87	238·62	247·71	8·98	19·23	12·33	61·44		1·25	1·26	1·65	13·33	20·72	16·67	169·70	186·37	1903.
1·48	0·66	55·05	55·34	52·60	44·81	...	45·26	1·14	2·69	4·63	283·48	291·95	7·28	18·36	10·34	60·79		1·28	1·23	1·89	16·24	23·72	19·35	193·92	212·27	Average.
1·52	0·87	*	*	*	*	...	*	1·84	3·08	4·39	266·37	275·68	11·06	17·22	10·53	65·61		1·45	1·49	1·73	13·95	22·08	28·69	178·41	197·10	1st half } 1903.
1·78	0·38	*	*	*	*	...	*	0·87	2·65	5·35	210·87	219·74	6·90	21·25	19·14	57·27		1·06	1·04	1·57	12·72	19·37	14·65	161·00	175·65	2nd half }
5·18	—2·42	15·41	14·07	...	14·16	...	14·16	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	1899.
8·01	—5·23	18·29	14·72	...	13·90	...	13·98	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	1900.
7·08	—1·02	18·87	15·10	...	13·69	...	13·79	0·88	4·43	...	85·74	91·05	0·65	3·29	...	63·62		1·19	1·01	...	7·18	9·38	6·44	141·21	147·65	1901.

Appendix 15.
Coaching traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2′ 6″ Gauge.																					
			1899	...	7	...	54,0	...	54,7	...	2	...	17	...	19	1	21	...	23·56	...	3·00	...	3·26
			1900	...	7	...	64,5	...	65,2	...	2	...	21	...	23	1	24	...	22·02	...	3·00	...	3·21
			1901	...	5	...	76,8	...	77,3	...	1	...	25	...	26	1	28	...	23·57	...	3·00	...	3·14
			1902	...	7	...	71,1	...	71,8	...	2	...	22	...	24	1	26	...	22·88	...	3·00	...	3·19
			1903	...	4	...	61,5	...	61,9	...	1	...	19	...	20	1	22	...	23·68	...	3·00	...	3·14
24	(a)	Barsi Light	Average ...	...	6	...	65,6	...	66,2	...	2	...	21	...	22	1	24	...	23·14	...	3·00	...	3·19
			1903 1st half	...	2	...	30,1	...	30,8	...	1	...	9	...	10	1	11	...	*	...	*	...	*
			1903 2nd half	...	2	...	31,4	...	31,6	...	...	...	10	...	10	...	11	...	*	...	*	...	*
			1903	...	...	...	117,7	...	117,7	...	...	...	25	...	25	1	26	*	*	*	*	*	*
25	(a)	Bakhtiarpur-Behar Light.†	1903 1st half	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1903 2nd half	...	...	...	117,7	...	117,7	...	...	...	25	...	25	1	26	*	*	*	*	*	*
			1903	4	8	...	4,4	...	5,6	4	6	...	10	..	20	...	24	42·00	27·96	...	10·50	...	15·69
28	(a)	Kalka-Simla †	1903 1st half	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42·00	27·96	...	10·50	...	15·69
			1903 2nd half	4	8	...	4,4	...	5,6	4	6	...	10	...	20	...	24						
			1899	1,9	9,3	...	281,1	...	292,3	3	19	...	1,92	...	2,19	9	2,45	14·64	7·38	...	3·00	...	3·27
			1900	1,6	8,7	...	282,9	...	293,2	2	19	...	1,91	...	2,17	9	2,42	14·65	7·35	...	3·00	...	3·25
			1901	1,8	10,2	...	290,6	...	302,6	7	20	...	2,00	...	2,27	9	2,52	12·56	6·27	...	2·84	...	3·05
			1902	1,5	9,0	...	232,8	...	243,3	6	17	...	1,75	...	1,98	8	2,23	12·33	6·09	...	3·00	...	3·21
			1903	1,8	10,9	...	244,0	...	256,7	7	19	...	1,74	...	2,00	8	2,24	11·98	6·00	...	3·00	...	3·24
10	(a)	Morvi	Average ...	1,7	9,6	...	266,3	...	277,6	7	19	...	1,86	...	2,12	9	2,37	13·23	6·62	...	2·97	...	3·20
			1903 1st half	9	4,5	...	116,3	...	121,7	3	8	...	84	...	95	5	1,09	*	*	...	*	...	*
			1903 2nd half	9	6,4	...	127,7	...	135,0	4	11	...	90	...	1,05	3	1,15	*	*	...	*	...	*
			1903	2	...	1,7	50,1	...	52,0	...	...	1	12	...	1	...	14	18·00	...	4·50	2·50	...	2·65
2	(c)	Parlakimedi Light.	1903 1st half	1	...	8	24,5	...	25,4	...	...	...	6	...	6	...	7	...	..	...	...	...	...
			1903 2nd half	1	...	9	25,6	...	26,6	...	...	1	6	...	7	...	7	...	...	...	...	...	...
			1901	3	5	...	221,1	...	221,9	...	...	...	36	...	36	...	36	...	...	...	...	...	...
			1902	2	8	...	257,1	...	258,1	...	1	...	40	...	41	...	41	...	...	...	...	...	...
			1903	2	7	...	267,9	...	268,8	...	1	...	42	...	43	...	44	...	...	...	...	...	...
9	(c)	Powayan Light	Average ...	2	7	...	248,7	...	249,8	...	1	...	39	...	40	...	40	...	...	...	...	...	...
			1903 1st half	1	4	...	134,2	...	134,7	...	1	...	21	...	22	...	22	...	...	...	...	...	...
			1903 2nd half	1	3	...	133,7	...	134,1	...	...	...	21	...	21	...	22	...	...	...	...	...	...
			1901	‡	‡	‡	‡	‡	‡	...	...	1	27	...	28	...	29	17·00	7·16	3·00	2·00	...	2·04
			1902	‡	‡	‡	‡	‡	‡	...	...	...	29	...	29	...	31	15·97	6·67	3·00	2·00	...	2·04
			1903	‡	‡	‡	‡	‡	‡	...	½	1	36	...	38	...	40	15·39	7·03	4·50	3·00	...	3·07
2	(b) & (d)	Jubbulpore-Gondia extension and Raipur-Dhamtari.	Average ...	‡	‡	‡	‡	‡	‡	...	...	1	31	...	32	...	33	16·12	6·95	3·50	2·33	...	2·38
			1903 1st half	‡	‡	‡	‡	‡	‡	...	1	1	19	...	20	...	21	15·64	7·20	4·50	3·00	...	3·07
			1903 2nd half	‡	‡	‡	‡	‡	‡	...	...	...	17	...	18	...	19	15·15	6·84	4·50	3·00	...	3·07
			1899	...	...	...	156,5	...	156,5	...	...	...	45	...	45	...	45	...	...	...	...	...	...
			1900	3	...	11,7	226,2	...	238,2	...	...	4	61	...	65	...	67	...	...	...	...	...	...
			1901	...	...	...	226,1	...	226,1	...	...	9	56	...	65	½	67	...	...	...	...	...	...
			1902	...	...	...	240,7	...	240,7	...	...	10	60	...	70	...	72	...	...	...	...	...	...
			1903	6	...	31,2	216,0	...	247,8	...	...	11	62	...	73	...	77	...	...	...	...	...	...
1	(a)	Ranaghat-Krishnagarh.	Average ...	2	...	8,6	213,1	...	221,9	...	...	7	57	...	64	...	66	...	...	...	...	...	...
			1903 1st half	3	...	14,6	106,9	...	121,8	...	...	5	31	...	36	...	38	...	...	...	...	...	...
			1903 2nd half	3	...	16,6	109,1	...	126,0	...	...	6	31	...	37	...	39	...	...	...	...	...	...

* Information not available. † Opened in 1903. ‡ Included with the Bengal-Nagpur railway.

Appendix 15.
Coaching traffic.

DIX 15—contd.
and portion of 44 in Report for 1902.]

traffic.
17 and 19 of Report.)

Year.	Average number of vehicles in a coaching train.				Average distance travelled in miles.				Average number of passengers in a coaching train.				Percentage of freight of capacity hauled.				Average weight of freight in a coaching train in tons.	Average dead weight in a coaching train in tons.	Total average weight in a coaching train in tons.	Average cost of carrying a passenger one mile in pies.	Average profit from carrying a passenger one mile in pies.
	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.	1st class.	2nd class.	Intermediate class.	3rd class.					
1899.																				2·07	0·29
1900.																				3·03	0·19
1901.																				2·69	0·55
1902.																				...	...
1903.																				...	...
Average.																				2·86	0·94
1st half 1903.																				2·92	0·99
2nd half 1903.																				2·14	0·91
Average.																				2·23	0·82
1903.																				1·85	0·36
1899.																				2·28	0·99
1900.																				1·92	1·33
1901.																				2·14	0·91
1902.																				2·23	0·82
1903.																				1·85	0·36
1st half 1903.																				2·28	0·99
2nd half 1903.																				1·92	1·33
Average.																				2·14	0·91
1903.																				2·08	1·00
1899.																				2·28	0·99
1900.																				1·92	1·33
1901.																				2·14	0·91
1902.																				2·23	0·82
1903.																				1·85	0·36
1st half 1903.																				2·28	0·99
2nd half 1903.																				1·92	1·33
Average.																				2·14	0·91
1903.																				2·08	1·00
1st half 1903.																				3·27	−0·69
2nd half 1903.																				...	...
Average.																				...	...
1903.																				...	...
1899.																				1·38	0·73
1900.																				1·52	0·72
1901.																				1·66	1·41
1902.																				...	...
1903.																				...	...
1st half 1903.																				...	...
2nd half 1903.																				...	...
Average.																				...	...
1903.																				...	...
1st half 1903.																				1·45	0·95
2nd half 1903.																				1·74	1·02
Average.																				1·59	0·98
1903.																				2·05	*
1899.																				...	...
1900.																				...	...
1901.																				...	...
1902.																				...	...
1903.																				...	...
Average.																				...	...
1899.																				...	...
1900.																				...	...
1901.																				...	...
1902.																				...	...
1903.																				...	...
Average.																				...	...
1st half 1903.																				...	...
2nd half 1903.																				...	...
Average.																				...	...
1903.																				...	...
1899.																				...	...
1900.																				...	...
1901.																				...	...
1902.																				...	...
1903.																				...	...
Average.																				...	...
1st half 1903.																				1·38	0·78
2nd half 1903.																				1·52	0·72
Average.																				1·66	1·41
1903.																				...	...
1899.																				...	...
1900.																				...	...
1901.																				...	...
1902.																				...	...
1903.																				...	...
Average.																				...	...
1st half 1903.																				...	...
2nd half 1903.																				...	...
Average.																				...	...
1903.																				...	...

Appendix 15.
Coaching traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2' 6" Gauge—*concld.*																					
			1899	...	...	...	326,3	...	326,3	...	...	...	59	...	59	...	59	...	...	...	...	...	...
			1900	...	...	...	393,4	...	393,4	...	...	...	67	...	67	...	67	...	...	...	...	...	...
			1901	2	8	8,0	401,4	8,6	419,0	...	...	1	66	2	69	1	71	21·91	10·55	4·44	3·01	4·25	3·22
			1902	4	9	11,0	403,6	12,6	428,5	...	...	2	66	2	70	...	72	...	...	...	...	...	...
			1903	1	1,4	12,8	403,3	9,6	427,2	...	...	2	68	2	70	1	72	...	...	...	...	...	...
33	(a)	Tarakeshwar-Magra.	Average ...	1	6	6,4	385,5	6,2	398,8	...	...	1	65	1	67	...	68	...	...	...	...	...	...
			1903 { 1st half	...	8	6,8	211,3	4,6	223,5	...	...	1	35	1	37	...	37	...	...	...	...	...	...
			1903 { 2nd half	1	6	6,0	192,0	5,0	203,7	...	...	1	31	1	33	1	35	...	...	...	...	...	...
			1899	...	...	...	136,8	...	136,8	...	...	...	37	...	37	...	37	...	...	...	...	...	...
			1900	...	...	...	144,9	...	144,9	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1901	2,5	...	7	103,6	9,0	116,0	...	...	...	27	...	27	...	31	...	...	...	...	...	...
			1902	2,3	...	3,1	111,0	9,0	125,4	...	...	...	29	...	29	...	34	...	...	...	...	...	...
			1903	2,8	...	3,9	128,9	9,3	144,9	3	...	1	29	1	34	...	38	...	...	...	...	...	...
34	(a)	Tezpur-Balipara	Averag ...	1,5	...	1,6	125,1	5,6	133,6	1	...	...	32	...	33	...	36	...	...	...	...	...	...
			1903 { 1st half	1,3	...	1,9	59,3	4,5	67,0	2	...	1	14	...	17	...	19	...	...	...	...	...	...
			1903 { 2nd half	1,5	...	2,0	69,6	4,3	77,9	1	...	...	15	1	17	...	19	...	...	...	...	...	...
		2' 0" Gauge.																					
			1899	4,1	11,8	...	44,8	...	60,7	52	70	...	85	...	2,07	30	2,77	56·48	28·53	...	13·04	...	20·88
			1900	4,7	10,8	...	49,1	...	64,6	56	64	...	1,00	...	2,20	33	2,97	55·22	29·40	...	14·52	...	21·84
			1901	4,4	13,1	...	56,4	...	73,9	59	85	...	1,09	...	2,53	35	3,42	54·07	33·18	...	13·23	...	21·27
			1902	5,2	13,7	...	61,2	...	80,1	65	81	...	1,22	...	2,73	36	3,75	55·05	29·73	...	14·84	...	21·86
			1903	6,0	16,2	...	86,9	...	109,1	72	97	...	1,14	...	2,83	40	3,77	53·16	29·45	...	11·59	...	19·50
1	(a)	Darjeeling-Himalayan.	Average ...	4,9	13,1	..	59,7	...	77,7	61	79	...	1,97	...	2,47	35	3,34	54·80	30·06	...	13·44	...	21·07
			1903 { 1st half	3,3	8,4	...	38,8	...	50,5	40	48	...	52	...	1 40	18	1,84	*	*	*	*	...	*
			1903 { 2nd half	2,7	7,8	...	48,1	...	53,6	32	49	...	62	...	1,43	22	1,93	*	*	*	*	...	*
			1899	6	...	28,4	737,5	...	766,5	1	...	12	2,26	...	2,39	...	2,40	...	...	...	...	...	...
			1900	4	...	28,0	744,0	...	772,4	1	...	11	2,27	...	2,39	...	2,41	...	...	...	...	...	...
			1901	7	...	...	†762,4	...	762,4	1	...	12	2,25	...	2,38	...	2,39	...	...	...	...	...	...
			1902	...	...	...	†782,6	...	782,6	...	...	13	2,28	...	2,41	...	2,43	...	...	...	...	...	...
	(a)	Howrah-Amta	1903	...	...	...	†808,3	...	808,3	...	...	...	2,50	...	2,50	...	2,52	...	...	...	...	...	...
			Average ...	2	...	11,3	767,0	...	778,4	1	...	10	2,31	...	2,41	...	2,43	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†411,3	...	411,3	...	...	...	1,28	...	1,28	...	1,29	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†397,0	...	397,0	...	...	...	1,22	...	1,22	...	1,23	...	...	...	...	...	...
			1899	5	...	14,0	275,8	...	290,3	1	...	4	64	...	69	...	69	...	...	...	...	...	...
			1900	4	...	12,2	286,3	...	298,9	...	...	4	66	...	70	...	71	...	...	...	...	...	...
			1901	...	...	...	†302,3	...	302,3	...	...	4	68	...	72	...	73	...	...	...	...	...	...
			1902	...	...	...	†313,7	...	313,7	...	...	5	69	...	74	...	74	...	...	...	...	...	...
	(a)	Howrah-Sheakhalla.	1903	...	...	...	†343,0	...	343,0	...	...	...	77	...	77	...	78	...	...	...	...	...	...
			Average ...	2	...	5,2	304,2	...	309,6	...	...	3	69	...	72	...	73	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†166,7	...	166,7	...	...	...	38	...	38	...	39	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†176,3	...	176,3	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1899	...	...	...	†62,0	...	62,0	...	...	...	12	...	12	...	13	...	...	...	...	...	...
			1900	...	...	...	†60,4	...	60,4	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1901	...	...	...	†76,1	...	76,1	...	...	...	15	...	15	...	15	...	...	...	...	...	...
			1902	...	...	...	†130,3	...	130,3	...	...	...	22	...	22	...	22	24·00	...	8·00	4·00	...	...
			1903	...	...	...	†154,6	...	154,6	...	...	...	25	...	25	...	25	24·00	...	8·00	4·00	...	...
	(a)	Jorhat . .	Average ...	...	...	...	96,7	...	96,7	...	...	...	17	...	17	...	17	24·00	...	8·00	4·00	...	...
			1903 { 1st half	...	...	...	†76,6	...	76,6	...	...	...	13	...	13	...	13	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†78,0	...	78,0	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1899	526,2	2,352,1	5,232,6	140,321,1	132877	161,719,7	31,52	46,97	52,08	6,70,81	8,01	80939	54,26	9,22,58	12·59	5·32	3·07	2·30	...	2·51
			©†1900	521,1	2,284,7	5,703,3	153,954,2	138446	176,307,9	31,83	47,08	56,03	7,51,66	8,47	89507	63,04	10,26,44	12·59	5·49	3·13	2·31	...	2·51
		GRAND TOTAL	1901	532,4	2,404,6	6,669,6	170,415,8	147359	194,748,5	32,73	52,43	64,39	8,48,25	9,32	100717	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	2·49
			1902	562,6	2,530,5	6,813,2	171,715,9	150260	196,648,2	38,57	56,59	67,60	8,54,97	9,75	102748	68,31	11,75,08	12·86	5·21	3·11	2·33	1·41	2·51
			1903	593,8	2,579,6	7,214,3	184,292,2	155507	210,230,6	41,56	58,13	71,68	9,16,31	10,46	109814	71,52	12,54,40	13·21	5·54	3·09	2·33	1·46	2·51
			Average ...	547,2	2,430,3	6,326,6	164,139,8	144870	187,980,9	35,25	52,24	62,36	8,08,40	9,20	96745	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	2·51

* Informatio
† Total shown under 3rd class as

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2' 6" Gauge—*concld.*	1899	...	...	...	326,3	...	326,3	...	...	...	59	...	59	...	59	...	...	...	...	...	...
			1900	...	...	...	393,4	...	393,4	...	...	...	67	...	67	...	67	...	...	...	...	...	...
			1901	2	8	8,0	401,4	8,6	419,0	...	...	...	66	2	68	1	71	21·91	10·55	4·44	3·01	4·25	3·22
			1902	4	9	11,0	403,6	12,6	428,5	...	...	...	66	2	70	...	72	...	...	...	...	...	...
			1903	1	1,4	12,8	403,3	9,6	427,2	...	...	...	66	2	70	1	72	...	...	...	...	...	...
38	(a)	Tarakeshwar-Magra.	Average ...	1	6	6,4	385,5	6,2	398,8	...	...	...	65	1	67	...	68	...	...	...	...	...	...
			1903 { 1st half	...	8	6,8	211,3	4,6	223,5	...	...	...	35	1	37	...	37	...	...	...	...	...	...
			1903 { 2nd half	1	6	6,0	192,0	5,0	203,7	...	...	...	31	1	33	1	35	...	...	...	...	...	...
			1899	...	...	...	136,8	...	136,8	...	...	...	37	...	37	...	37	...	...	...	...	...	...
			1900	...	...	...	144,9	...	144,9	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1901	2,5	...	7	163,6	9,0	146,0	...	...	...	27	...	27	...	31	...	...	...	...	...	...
			1902	2,3	...	3,1	111,0	9,0	125,4	...	...	...	29	...	29	...	34	...	...	...	...	...	...
			1903	2,8	...	3,9	128,9	9,3	144,9	3	...	1	29	1	34	...	38	...	...	...	...	...	...
34	(a)	Tezpur-Balipara	Averag ...	1,5	...	1,6	125,1	5,6	133,6	1	...	...	32	...	33	...	36	...	...	...	...	...	...
			1903 { 1st half	1,3	...	1,9	59,3	4,5	67,0	2	...	1	14	...	17	...	19	...	...	...	...	...	...
			1903 { 2nd half	1,5	...	2,0	69,6	4,8	77,9	1	...	...	15	1	17	...	19	...	...	...	...	...	...
		2' 0" Gauge.	1899	4,1	11,8	...	44,8	...	60,7	52	70	...	85	...	2,07	30	2,77	56·48	28·53	...	13·04	...	20·88
			1900	4,7	10,8	...	49,1	...	64,6	56	64	...	1,00	...	2,20	33	2,97	55·22	29·40	...	14·52	...	21·84
			1901	4,4	13,1	...	56,4	...	73,9	59	85	...	1,09	...	2,53	35	3,42	54·07	33·18	...	13·23	...	21·27
			1902	5,2	13,7	...	61,2	...	80,3	65	81	...	1,22	...	2,73	36	3,75	55·65	29·73	...	14·84	...	21·86
			1903	6,0	16,2	...	86,9	...	109,1	72	97	...	1,14	...	2,83	40	3,77	53·16	29·45	...	11·59	...	19·50
36	(a)	Darjeeling-Himalayan.	Average ...	4,9	13,1	..	59,7	...	77,7	61	79	...	1,07	...	2,47	35	3,34	54·80	30·06	...	13·44	...	21·07
			1903 { 1st half	3,3	8,4	...	38,8	...	50,5	40	48	...	52	...	1 40	18	1,84	*	*	*	*	...	*
			1903 { 2nd half	2,7	7,8	...	48,1	..	53,6	32	40	...	62	...	1,43	22	1,93	*	*	*	*	...	*
			1899	6	...	28,4	737,5	...	766,5	1	...	12	2,26	...	2,39	...	2,40	...	...	...	...	...	...
			1900	4	...	28,0	744,0	...	772,4	1	...	11	2,27	...	2,39	...	2,41	...	...	...	...	...	...
			1901	7	...	...	†762,4	...	762,4	1	...	12	2,25	...	2,38	...	2,39	...	...	...	...	...	...
			1902	...	...	...	†782,6	...	792,6	...	...	13	2,28	...	2,41	...	2,43	...	...	...	...	...	...
			1903	...	...	...	†808,3	...	808,3	...	...	...	2,50	...	2,50	...	2,52	...	...	...	...	...	...
37	(a)	Howrah-Amta	Average ...	2	...	11,3	767,0	...	778,4	1	...	10	2,31	...	2,41	...	2,43	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†411,3	...	411,3	...	...	...	1,28	...	1,28	...	1,29	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†397,0	...	397,0	...	...	...	1,22	...	1,22	...	1,23	...	...	...	...	...	...
			1899	5	...	14,0	275,8	...	290,3	1	...	4	64	...	69	...	69	...	...	...	...	...	...
			1900	4	...	12,2	286,3	...	298,9	...	...	4	66	...	70	...	71	...	...	...	...	...	...
			1901	...	...	...	†302,3	...	302,3	...	...	4	68	...	72	...	73	...	...	...	...	...	...
			1902	...	...	...	†313,7	...	313,7	...	...	5	69	...	74	...	74	...	...	...	...	...	...
			1903	...	...	...	†343,0	...	343,0	...	...	...	77	...	77	...	78	...	...	...	...	...	...
18	(a)	Howrah-Sheakhalla.	Average ...	2	...	5,2	304,2	...	309,6	...	...	3	69	...	72	...	73	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†166,7	...	166,7	...	...	...	38	...	38	...	39	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†176,3	...	176,3	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1899	...	...	...	†62,0	...	62,0	...	...	...	12	...	12	...	13	...	...	...	...	...	...
			1900	...	...	...	†60,4	...	60,4	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1901	...	...	...	†76,1	...	76,1	...	...	...	15	...	15	...	15	...	...	...	...	...	...
			1902	...	...	...	†130,3	...	130,3	...	...	...	22	...	22	...	22	24·00	...	8·00	4·00	...	...
			1903	...	...	...	†154,6	...	154,6	...	...	...	25	...	25	...	25	24·00	...	8·00	4·00	...	...
9	(a)	Jorhat . .	Average ...	...	...	....	96,7	...	96,7	...	...	...	17	...	17	...	17	24·00	...	8·00	4·00	...	...
			1903 { 1st half	...	...	...	†76,6	...	76,6	...	...	...	13	...	13	...	13	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†79,0	...	78,0	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1899	526,2	2,352,1	5,232,6	140,321,1	132877	161,719,7	31,52	46,97	52,08	6,70,81	8,01	80939	54,26	9,22,58	12·59	5·32	3·07	2·30	...	2·51
			1900	521,1	2,284,7	5,703,3	153,954,2	138446	176,307,9	31,83	47,08	56,03	7,51,66	8,47	89507	63,04	10,26,44	12·59	5·49	3·11	2·31	...	2·51
			1901	532,4	2,404,8	6,669,8	170,415,8	147359	194,748,8	32,73	52,43	64,39	8,48,25	9,32	100717	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	2·48
		GRAND TOTAL	1902	562,6	2,530,5	6,813,2	171,715,9	150260	196,648,2	38,57	56,59	67,60	8,54,97	9,75	102748	68,31	11,75,08	12·86	5·21	3·11	2·33	1·41	2·51
			1903	593,8	2,579,6	7,214,3	184,292,2	155507	210,280,6	41,56	58,13	71,68	9,16,31	10,46	109814	71,52	12,54,40	13·21	5·54	3·09	2·33	1·48	2·51
			Average ...	547,2	2,430,3	6,326,6	164,139,8	144870	187,980,9	35,25	52,24	62,36	8,08,40	9,20	96745	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	2·51

* Information
† Total shown under 3rd class as

Appendix 16.
Goods traffic.

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Quantity carried in thousands of tons. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Total.	Earnings in thousands of rupees. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Rents, miscellaneous, etc.	Total.
		5′ 6″ gauge.														
			1899	104	...	20	16	...	140	3,02	...	20	8	...	8	3,38
			1900	159	...	24	23	...	206	4,78	...	25	19	...	4	5,26
			1901	125	1	29	23	...	178	4,16	2	31	3	...	...	4,52
			1902	112	2	25	21	...	159	3,86	3	26	9	...	1	4,25
1	(a)	Bengal Central	1903	163	2	24	17	...	206	5,59	4	28	8	...	1	6,00
			Average	133	2	24	20	...	178	4,28	3	26	9	...	3	4,68
			1903 1st half	36	1	12	9	...	58	1,06	2	13	4	...	...	1,25
			1903 2nd half	127	1	12	8	...	148	4,53	2	15	4	...	1	4,75
			1899	671	...	652	528	1	1,852	52,95	5	5,20	5,26	4	14	63,64
			1900	898	1	754	315	2	1,970	78,98	16	6,73	4,70	9	96	91,62
			1901	880	...	805	524	3	2,212	50,07	4	8,70	6,10	23	25	65,39
			1902	993	...	906	975	6	2,880	53,97	5	10,56	11,60	55	25	76,98
2	(a), (b) & (d)	Bengal-Nagpur	1903	1,025	...	1,177	707	9	2,918	60,33	4	17,41	10,37	60	33	89,13
			Average	8 3	...	859	610	4	2,366	59,26	7	9,72	7,61	30	39	77,35
			1903 1st half	600	...	554	296	4	1,454	35,83	3	8,16	5,05	35	18	49,60
			1903 2nd half	425	...	623	411	5	1,464	24,50	1	9,25	5,32	25	20	39,53
			1899	1,680	1	68	475	32	2,256	1,15,40	22	2,90	5,40	4,15	10	1,28,17
			1900	1,882	1	96	424	33	2,436	1,19,32	20	4,21	4,50	3,70	18	1,32,11
			1901	1,509	1	70	374	19	1,973	97,81	16	2,82	4,32	3,10	13	1,08,34
			1902	1,516	1	42	352	16	1,927	97,91	20	1,50	3,78	3,43	12	1,06,94
3	(a), (c) to (f), (m) & (n)	Bombay, Baroda and Central India.	1903	1,411	2	37	301	19	1,770	1,06,31	44	1,74	3,23	4,03	13	1,15,88
			Average	1,600	1	62	385	24	2,072	1,07,35	25	2,63	4,25	3,68	13	1,18,29
			1903 1st half	927	1	19	165	11	1,123	66,25	15	91	2,05	1.94	8	71,38
			1903 2nd half	484	1	18	136	8	647	40,06	29	83	1,18	2,09	5	44,50
			1899	1,115	...	206	242	1	1,564	50,31	1	1,35	2,79	2	63	55,11
			1900	1,230	...	244	207	1	1,682	55,04	1	2,04	2,33	2	72	60,16
			1901	1,114	...	277	224	1	1,616	51,85	1	2,33	2,28	2	58	57,07
			1902	1,228	...	276	295	1	1,800	59,18	1	1,94	3,13	1	44	64,71
4	(a)	Eastern Bengal State	1903	1,645	1	339	669	...	2,654	55,19	3	1,93	3,36	1	46	60,98
			Average	1,266	...	268	328	1	1,863	54,31	1	1,92	2,78	2	57	59,61
			1903 1st half	629	1	172	381	...	1,183	15,02	1	87	1,82	1	10	17,83
			1903 2nd half	1,016	...	167	288	...	1,471	40,17	2	1,06	1,54	...	36	43,15
			1899	3,836	10	3,898	1,278	27	9,049	2,87,87	3,50	1,35,30	17,56	1,88	1,14	4,47,26
			1900	3,858	11	4,658	1,488	38	10,053	2,96,43	4,31	1,57,12	18,15	2,21	81	4,79,03
			1901	3,656	6	5,294	1,456	6	10,418	2,86,01	3,13	1,80,25	19,28	1,92	64	4,91,23
			1902	3,810	11	5,042	1,615	6	10,484	2,74,84	3,46	1,71,72	20,75	2,08	90	4,73,75
5	(a) to (d)	East Indian	1903	4,006	20	5,368	1,301	7	10,702	2,85,45	4,48	1,71,53	18,75	2,61	1,69	4,84,51
			Average	3,833	11	4,852	1,428	17	10141	2,86,12	3,78	1,63,18	18,90	2,14	1,04	4,75,16
			1903 1st half	2,312	14	2,668	619	...	5,617	1,54,93	2,52	83,27	9,80	1,15	85	2,52,52
			1903 2nd half	1,694	6	2,700	682	7	5,085	1,30,52	1,96	88,26	8,95	1,46	84	2,31,99
			1899	2,279	9	138	558	13	2,997	2,54,05	2,03	3,23	9,69	2,47	69	2,72,16
			1900	2,322	7	138	520	25	3,012	2,32,65	1,83	4,36	9,18	3,68	89	2,52,59
			1901	2,517	8	146	513	29	3,213	2,94,92	1,90	3,57	7,16	3,70	2,03	3,13,28
			1902	2,577	11	148	525	17	3,278	2,90,82	2,63	3,54	9,55	2,93	1,76	3,11,23
6	(a)	Great Indian Peninsula	1903	2,206	24	155	1,117	16	4,518	3,31,48	4,48	2,90	10,74	2,64	26	3,52,50
			Average	2,580	12	145	647	20	3,404	2,80,79	2,57	3,52	9,26	3,08	1,13	3,00,35
			1903 1st half	1,994	10	79	505	7	2,595	2,12,58	1,86	1,52	5,76	1,12	50	2,23,34
			1903 2nd half	1,212	14	76	612	9	1,923	1,18,90	2,62	1,38	4,98	1,52	—24	1,29,16
			1899	573	2	11	413	2	1,001	47,39	41	55	3,17	10	14	51,76
			1900	872	1	6	332	5	1,216	77,72	11	25	4,12	57	1,83	84,60
			1901	783	1	13	512	...	1,309	62,90	14	61	4,95	15	—16	68,59
			1902	872	13	15	448	1	1,349	66,12	1,77	98	5,53	19	64	75,23
6	(c) to (e) & (f)	Indian Midland	1903	Included	with the	G. I. P.	rail	way		56,72	1,47	92	5,36	42	—4	64,85
			Average	775	4	11	426	2	1,218	62,17	78	66	4,63	29	48	69,01
			1903 1st half	Included	with the	G. I. P.	rail	way		36,16	40	36	2,74	16	—6	39,76
			1903 2nd half							20,56	1,07	56	2,62	26	2	25,09
			1899	852	2	189	276	2	1,321	58,78	60	7,18	1,78	46	25	69,05
			1900	832	2	200	231	2	1,267	58,37	56	7,55	1,91	63	25	69,27
			1901	1,524	3	542	341	3	2,413	78,70	94	13,65	3,06	44	42	97,21
			1902	1,441	4	494	378	2	2,319	75,89	1,29	12,14	4,33	78	30	94,73
7	(a) to (c)	Madras	1903	1,528	2	400	408	2	2,340	82,83	83	9,90	4,26	37	46	98,65
			Average	1,235	3	365	327	2	1,932	70,91	84	10,08	3,07	54	34	85,78
			1903 1st half	806	1	194	188	1	1,190	44,24	41	4,86	1,97	22	25	51,95
			1903 2nd half	722	1	206	220	1	1,150	38,59	42	5,04	2,29	15	21	46,70
			1899	297	1	326	251	...	875	19,92	26	12,19	1,78	6	1	34,22
			1900	351	1	418	241	1	1,012	26,14	15	14,64	1,49	9	5	42,56
			1901	307	1	372	240	...	920	19,22	24	12,31	1,00	6	4	32,87
			1902	321	...	390	223	1	935	21,06	20	12,84	1,10	9	7	35,36
8	(a) & (b)	Nizam's Guaranteed State.	1903	363	1	319	212	...	895	22,93	14	10,98	85	10	8	35,08
			Average	328	1	365	238	...	927	21,85	20	12,59	1,25	8	5	36,02
			1903 1st half	211	1	189	114	...	515	13,60	8	6,53	38	5	4	20,88
			1903 2nd half	152	...	130	98	...	380	9,33	6	4,45	47	5	4	14,40

* For Great Indian Peninsula railway and Indian

† Included with the Great Indian Peninsula railway

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2' 6" Gauge—*concld.*																					
			1899	...	...	...	326,3	...	326,3	...	...	...	59	...	59	...	59	...	...	...	...	...	...
			1900	...	...	...	393,4	...	393,1	...	...	...	67	...	67	...	67	...	...	...	...	...	...
			1901	2	8	8,0	401,4	8,6	419,0	...	...	...	66	2	68	1	71	21·91	10·55	4·44	3·01	4·25	3·22
			1902	4	9	11,0	403,6	12,6	428,5	...	...	...	66	2	70	...	72	...	...	...	...	...	...
			1903	1	1,4	12,8	403,3	9,6	427,2	...	...	...	66	2	70	1	72	...	...	...	...	...	...
33	(a)	Tarakeshwar-Magra.	Average ...	1	6	6,4	385,5	6,2	398,8	...	...	...	65	1	67	...	68	...	...	...	...	...	...
			1903 { 1st half	...	8	6,8	211,3	4,6	223,5	...	...	...	35	1	37	...	37	...	...	...	...	...	...
			1903 { 2nd half	1	6	6,0	192,0	5,0	208,7	...	...	...	31	1	33	1	35	...	...	...	...	...	...
			1899	...	...	...	136,8	...	136,8	...	...	...	37	...	37	...	37	...	...	...	...	...	...
			1900	...	...	...	144,9	...	144,9	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1901	2,5	...	7	163,8	9,0	146,0	...	...	...	27	...	27	...	31	...	...	...	...	...	...
			1902	2,3	...	3,1	111,0	9,0	125,4	...	...	...	29	...	29	...	34	...	...	...	...	...	...
			1903	2,8	...	3,9	128,9	9,3	144,9	3	...	...	29	1	34	...	38	...	...	...	...	...	...
34	(a)	Tezpur-Balipara	Averag ...	1,5	...	1,6	125,1	5,6	133,6	1	...	...	32	...	33	...	36	...	...	...	...	...	...
			1903 { 1st half	1,3	...	1,9	59,3	4,5	67,0	2	...	1	14	...	17	...	19	...	...	...	...	...	...
			1903 { 2nd half	1,5	...	2,0	69,6	4,8	77,9	1	...	...	15	1	17	...	19	...	...	...	...	...	...
		2' 0" Gauge.																					
			1899	4,1	11,8	...	44,8	...	60,7	52	70	...	85	...	2,07	30	2,77	56·48	28·53	...	13·04	...	20·88
			1900	4,7	10,8	...	49,1	...	64,6	56	64	...	1,00	...	2,20	33	2,97	55·22	29·40	...	14·52	...	21·84
			1901	4,4	13,1	...	56,4	...	73,9	59	85	...	1,09	...	2,53	35	3,42	54·07	33·18	...	13·23	...	21·27
			1902	5,2	13,7	...	61,2	...	80,3	65	81	...	1,22	...	2,73	36	3,75	55·65	29·73	...	14·84	...	21·86
			1903	6,0	16,2	...	86,9	...	109,1	72	97	...	1,14	...	2,83	40	3,77	53·16	29·45	...	11·59	...	19·50
36	(a)	Darjeeling-Himalayan.	Average ...	4,9	13,1	..	59,7	...	77,7	61	79	...	1,07	...	2,47	35	3,34	54·80	30·06	...	13·44	...	21·07
			1903 { 1st half	3,3	8,4	...	38,8	...	50,5	40	48	...	52	...	1 40	18	1,84	*	*	*	*	...	*
			1903 { 2nd half	2,7	7,8	...	48,1	..	53,6	32	40	...	62	...	1,43	22	1,93	*	*	*	*	...	*
			1899	6	...	28,4	737,5	...	766,5	1	...	12	2,26	...	2,39	...	2,40	...	...	...	...	...	...
			1900	4	...	28,0	744,0	...	772,4	1	...	11	2,27	...	2,39	...	2,41	...	...	...	...	...	...
			1901	7	...	...	†762,4	...	762,4	1	...	12	2,25	...	2,38	...	2,39	...	...	...	...	...	...
			1902	...	...	...	†782,6	...	792,6	...	...	13	2,28	...	2,41	...	2,43	...	...	...	...	...	...
37	(a)	Howrah-Amta	1903	...	...	...	†808,3	...	808,3	...	...	...	2,50	...	2,50	...	2,52	...	...	...	...	...	...
			Average ...	2	...	11,3	767,0	...	778,4	1	...	10	2,31	...	2,41	...	2,43	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†411,3	...	411,3	...	...	...	1,28	...	1,28	...	1,29	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†397,0	...	397,0	...	...	...	1,22	...	1,22	...	1,23	...	...	...	...	...	...
			1899	5	...	14,0	275,8	...	290,3	1	...	4	64	...	69	...	69	...	...	...	...	...	...
			1900	4	...	12,2	286,3	...	298,9	...	...	4	66	...	70	...	71	...	...	...	...	...	...
			1901	...	...	...	†302,3	...	302,3	...	...	4	68	...	72	...	73	...	...	...	...	...	...
			1902	...	...	...	†313,7	...	313,7	...	...	5	69	...	74	...	74	...	...	...	...	...	...
38	(a)	Howrah-Sheakhalla.	1903	...	...	...	†343,0	...	343,0	...	...	...	77	...	77	...	78	...	...	...	...	...	...
			Average ...	2	...	5,2	304,2	...	309,6	...	...	3	69	...	72	...	73	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†166,7	...	166,7	...	...	...	38	...	38	...	39	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†176,3	...	176,3	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1899	...	...	...	†62,0	...	62,0	...	...	...	12	...	12	...	13	...	...	...	...	...	...
			1900	...	...	...	†60,4	...	60,4	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1901	...	...	...	†76,1	...	76,1	...	...	...	15	...	15	...	15	...	...	...	...	...	...
			1902	...	...	...	†130,5	...	130,5	...	...	...	22	...	22	...	22	24·00	...	8·00	4·00	...	...
			1903	...	...	...	†154,6	...	154,6	...	...	...	25	...	25	...	25	24·00	...	8·00	4·00	...	...
9	(a)	Jorhat . .	Average ...	...	...	....	96,7	...	96,7	...	...	...	17	...	17	...	17	24·00	...	8·00	4·00	...	...
			1903 { 1st half	...	...	...	†76,6	...	76,6	...	...	...	13	...	13	...	13	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†79,0	...	78,0	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1899	526,2	2,352,1	5,232,6	140,321,1	132877	161,719,7	31,52	46,97	52,08	6,70,81	8,01	80939	54,26	9,22,58	12·59	5·32	3·07	2·30	...	2·51
			1900	521,1	2,284,7	5,703,3	153,954,2	138446	176,307,9	31,83	47,08	56,03	7,51,66	8,47	89507	63,04	10,26,44	12·59	5·49	3·13	2·31	...	2·51
		GRAND TOTAL	1901	532,4	2,404,6	6,669,6	170,415,8	147359	194,748,5	32,73	52,43	64,39	8,48,25	9,32	100717	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	2·48
			1902	562,6	2,530,5	6,813,2	171,715,9	150260	196,648,2	38,57	56,59	67,60	8,54,97	9,75	102748	68,31	11,75,08	12·86	5·21	3·11	2·33	1·41	2·51
			1903	593,8	2,579,6	7,214,3	184,292,2	155507	210,280,6	41,56	58,13	71,68	9,16,31	10,46	109814	71,52	12,54,40	13·21	5·54	3·09	2·33	1·48	2·51
			Average ...	547,2	2,430,3	6,326,6	164,139,8	144870	187,980,9	35,25	52,24	62,36	8,08,40	9,20	96745	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	2·51

* Information
† Total shown under 3rd class as

Appendix 16.
Goods traffic.

Appendices 16, 17, 32 and

Goods

(Referred to in paragraphs

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Quantity carried in thousands of tons. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock	Total.	Earnings in thousands of rupees. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Rents, miscellaneous, etc.	Total.
		5′ 6″ gauge—*concld.*														
		North Western State. Commercial section	1899							2,01,48	4,09	60	13,56	1,59	2,03	2,23,35
			1900							1,59,49	3,99	44	12,15	1,19	1,12	1,78,38
			1901							2,48,32	5,40	92	14,91	1,13	2,37	2,73,05
			1902							2,40,17	7,22	1,30	18,50	1,74	2,94	2,71,87
			1903	*	*	*	*	*	*	2,93,30	6,78	1,71	19,13	1,61	3,17	3,25,70
			Average							2,28,55	5,50	99	15,65	1,45	2,33	2,54,47
			1903 1st half							1,36,71	3,31	95	9,68	82	1,47	1,52,94
			1903 2nd half							1,56,60	3,46	76	9,45	79	1,70	1,72,76
			1899							12,61	39	31	3,69	12	13	16,65
			1900							14,17	61	20	2,30	21	10	17,59
			1901							16,82	1,28	30	2,73	31	15	21,59
			1902							14,17	1,81	23	3,02	25	10	19,58
			1903	*	*	*	*	*	*	16,88	1,11	19	2,28	46	23	21,15
			Average							14,93	1,04	25	2,68	27	14	19,31
			1903 1st half							8,06	54	9	1,02	14	12	10,06
			1903 2nd half							8,80	58	10	1,19	32	10	11,09
			1899	2,879	22	34	2,120	15	5,070	2,14,09	4,48	91	16,65	1,71	2,16	2,40,00
			1900	2,703	22	26	2,535	6	5,292	1,73,66	4,60	64	14,45	1,40	1,22	1,95,97
			1901	3,431	28	35	2,105	5	5,604	2,65,14	6,68	1,22	17,64	1,44	2,52	2,94,64
			1902	3,157	36	42	2,693	6	5,934	2,54,34	9,03	1,53	21,52	1,99	3,04	2,91,45
9	(*a*) to (*h*).	Total ...	1903	3,380	37	64	2,527	6	6,064	3,10,18	7,89	1,90	21,41	2,07	3,40	3,46,85
			Average	3,110	29	40	2,406	8	5,593	2,43,48	6,54	1,24	18,33	1,72	2,47	2,73,78
			1903 1st half	1,743	18	32	1,581	3	3,377	1,44,78	3,65	1,04	10,77	96	1,59	1,62,99
			1903 2nd half	1,637	19	32	996	3	2,687	1,66,40	4,04	86	10,64	1,11	1,81	1,83,86
			1899	1,171	3	30	771	...	1,975	51,92	26	1,00	4,27	23	21	57,89
			1900	1,139	4	32	628	...	1,803	49,54	57	1,15	4,10	15	23	55,74
			1901	1,287	3	34	574	1	1,899	59,59	35	1,23	4,64	18	28	66,27
10	(*a*) to (*c*).	Oudh and Rohilkhand State.	1902	1,348	8	48	898	...	2,302	54,84	70	1,91	6,83	17	30	64,75
			1903	1,421	8	43	886	1	2,359	57,06	69	1,74	7,46	19	31	67,45
			Average	1,273	5	38	751	...	2,067	54,59	51	1,41	5,46	18	27	62,42
			1903 1st half	858	6	35	385	...	1,274	34,14	56	1,22	3,57	10	16	39,72
			1903 2nd half	563	2	18	501	1	1,085	22,95	13	52	3,89	9	15	27,73
...	...	East Coast† ...	1899	527	...	98	227	...	852	14,37	3	3,12	2,81	1	20	20,54
			1900	762	...	160	280	1	1,203	23,86	11	4,94	2,99	2	16	32,08
		3′ 3⅜″ gauge.														
			1899	95	...	9	368	...	472	4,19	2	20	1,99	1	6	6,47
			1900	116	...	11	256	1	384	4,78	1	23	1,64	2	4	6,72
			1901	166	...	13	60	...	239	7,44	1	31	96	1	7	8,80
			1902	149	...	13	164	...	326	6,03	5	25	1,47	1	15	7,96
11	(*a*)&(*b*)	Assam-Bengal ...	1903	200	...	16	187	...	403	7,88	3	40	1,76	3	10	10,20
			Average	145	...	13	207	...	365	6,07	2	28	1,56	2	8	8,03
			1903 1st half	55	...	6	143	...	204	2,35	2	15	1,16	2	8	3,78
			1903 2nd half	145	...	10	44	...	199	5,53	1	25	60	1	2	6,42
			1899	985	...	44	277	1	1,307	36,80	...	73	2,36	2	53	41,44
			1900	945	...	44	258	...	1,247	36,11	...	73	2,89	1	33	40,07
			1901	1,024	...	43	303	...	1,370	42,74	...	75	3,37	2	29	47,17
			1902	1,081	...	58	321	...	1,460	47,72	...	1,02	3,74	2	33	** 47,09
12	(*a*) to (*c*).	Bengal and North-Western.	1903	1,327	...	60	320	...	1,707	58,83	2	79	3,96	7	28	** 58,21
			Average	1,072	...	50	296	...	1,418	44,44	...	81	3,47	3	35	46,80
			1903 1st half	788	...	45	164	...	997	36,33	...	73	2,06	2	11	**35,35
			1903 2nd half	539	...	15	156	...	710	22,50	2	6	1,90	5	17	**22,86
			1899	26	...	2	11	...	39	1,84	...	2	8	...	3	2,03
			1900	47	...	6	3	2	63	2,27	...	13	10	...	3	2,49
			1901	69	...	4	5	...	78	3,28	...	9	3	...	1	3,41
			1902	75	...	9	7	...	91	3,36	...	17	5	...	3	3,61
13	(*a*)&(*b*)	Bengal Doors ...	1903	95	...	13	13	...	121	4,13	...	24	8	...	20	4,65
			Average	62	...	7	9	...	78	2,97	...	14	7	...	6	3,24
			1903 1st half	33	...	7	9	...	49	1,19	...	16	6	...	14	1,55
			1903 2nd half	62	...	6	4	...	72	2,94	...	8	2	...	6	3,10
			1899	297	...	4	14	1	316	10,76	...	11	17	3	2	11,09
			1900	338	...	3	15	1	357	12,47	...	8	19	5	6	12,85
			1901	230	...	...	15	...	245	7,76	...	...	11	1	2	7,90
			1902	232	...	...	12	1	245	6,97	...	...	9	1	2	7,09
14	(*a*) to (*d*).	Bhavnagar-Gondal-Junagad-Porbandar.	1903	245	...	3	16	...	264	8,34	...	5	10	1	1	8,51
			Average	268	...	2	14	1	285	9,26	...	5	13	2	3	9,49
			1903 1st half	156	...	...	9	...	165	5,70	...	1	6	1	...	5,78
			1903 2nd half	89	...	3	7	...	99	2,64	...	4	4	...	1	2,73

* Shown under total North Western railway as the information by sections is not available.
† Transferred partly to the Bengal-Nagpur
‡ Information not available.
** Excluding the Cawnpore-Burhwal metre gauge link earnings
Bengal and North-Western and in the case of total with the Oudh

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2' 6" Gauge—*concld.*	1899	...	...	...	326,3	...	326,3	...	...	...	59	...	59	...	59	...	...	...	...	...	...
			1900	...	...	...	393,4	...	393,1	...	...	...	67	...	67	...	67	...	...	...	...	...	...
			1901	2	8	8,0	401,4	8,6	419,0	...	...	...	66	2	68	1	71	21·91	10·55	4·44	3·01	4·25	3·22
			1902	4	9	11,0	403,6	12,6	428,5	...	...	...	66	2	70	...	72	...	...	...	...	...	...
			1903	1	1,4	12,8	403,3	9,6	427,2	...	...	...	66	2	70	1	72	...	...	...	...	...	...
33	(a)	Tarakeshwar-Magra.	Average ...	1	6	6,4	385,5	6,2	398,8	...	...	...	65	1	67	...	68	...	...	...	...	...	...
			1903 { 1st half	...	3	6,8	211,3	4,6	223,5	...	...	...	35	1	37	...	37	...	...	...	...	...	...
			1903 { 2nd half	1	6	6,0	192,0	5,0	203,7	...	...	...	31	1	33	1	35	...	...	...	...	...	...
			1899	...	...	...	136,8	...	136,8	...	...	...	37	...	37	...	37	...	...	...	...	...	...
			1900	...	...	...	144,9	...	144,9	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1901	2,5	...	7	103,6	9,0	146,0	...	...	...	27	...	27	...	31	...	...	...	...	...	...
			1902	2,3	...	3,1	111,0	9,0	125,4	...	...	...	29	...	29	...	34	...	...	...	...	...	...
			1903	2,8	...	3,9	128,9	9,3	144,9	3	...	1	29	1	34	...	38	...	...	...	...	...	...
34	(a)	Tezpur-Balipara	Averag ...	1,5	...	1,6	125,1	5,6	133,6	1	...	...	32	...	33	...	36	...	...	...	...	...	...
			1903 { 1st half	1,3	...	1,9	59,3	4,5	67,0	2	...	1	14	...	17	...	19	...	...	...	...	...	...
			1903 { 2nd half	1,5	...	2,0	69,6	4,8	77,9	1	...	...	15	1	17	...	19	...	...	...	...	...	...
		2' 0" Gauge.	1899	4,1	11,8	...	44,8	...	60,7	52	70	...	85	...	2,07	30	2,77	56·48	28·53	...	13·04	...	20·88
			1900	4,7	10,8	...	49,1	...	64,6	56	64	...	1,00	...	2,20	33	2,97	55·22	29·40	...	14·52	...	21·84
			1901	4,4	13,1	...	56,4	...	73,9	59	85	...	1,09	...	2,53	35	3,42	54·07	33·18	...	13·23	...	21·27
			1902	5,2	13,7	...	61,2	...	80,3	65	81	...	1,22	...	2,73	36	3,75	55·65	29·73	...	14·84	...	21·86
			1903	6,0	16,2	...	86,9	...	109,1	72	97	...	1,14	...	2,83	40	3,77	53·16	29·45	...	11·59	...	19·50
36	(a)	Darjeeling-Himalayan.	Average ...	4,9	13,1	..	59,7	...	77,7	61	79	...	1,07	...	2,47	35	3,34	54·80	30·06	...	13·44	...	21·07
			1903 { 1st half	3,3	8,4	...	38,8	...	50,5	40	48	...	52	...	1 40	18	1,84	*	*	*	*	...	*
			1903 { 2nd half	2,7	7,8	...	48,1	...	53,6	32	40	...	62	...	1,43	22	1,93	*	*	*	*	...	*
			1899	6	...	28,4	737,5	...	766,5	1	...	12	2,26	...	2,39	...	2,40	...	...	...	...	...	...
			1900	4	...	28,0	744,0	...	772,4	1	...	11	2,27	...	2,39	...	2,41	...	...	...	...	...	...
			1901	7	...	...	†762,4	...	762,4	1	...	12	2,25	...	2,38	...	2,39	...	...	...	...	...	...
			1902	...	...	...	†782,6	...	792,6	...	...	13	2,28	...	2,41	...	2,43	...	...	...	...	...	...
			1903	...	...	...	†808,3	...	808,3	...	...	...	2,50	...	2,50	...	2,52	...	...	...	...	...	...
37	(a)	Howrah-Amta	Average ...	2	...	11,3	767,0	...	778,4	1	...	10	2,31	...	2,41	...	2,43	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†411,3	...	411,3	...	...	...	1,28	...	1,28	...	1,29	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†397,0	...	397,0	...	...	...	1,22	...	1,22	...	1,23	...	...	...	...	...	...
			1899	5	...	14,0	275,8	...	290,3	1	...	4	64	...	69	...	69	...	...	...	...	...	...
			1900	4	...	12,2	286,3	...	298,9	...	...	4	66	...	70	...	71	...	...	...	...	...	...
			1901	...	...	...	†302,3	...	302,3	...	...	4	68	...	72	...	73	...	...	...	...	...	...
			1902	...	...	...	†313,7	...	313,7	...	...	5	69	...	74	...	74	...	...	...	...	...	...
			1903	...	...	...	†343,0	...	343,0	...	...	...	77	...	77	...	78	...	...	...	...	...	...
38	(a)	Howrah-Sheakhalla.	Average ...	2	...	5,2	304,2	...	309,6	...	...	3	69	...	72	...	73	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†166,7	...	166,7	...	...	...	38	...	38	...	39	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†176,3	...	176,3	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1899	...	...	...	†62,0	...	62,0	...	...	...	12	...	12	...	13	...	...	...	...	...	...
			1900	...	...	...	†60,4	...	60,4	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1901	...	...	...	†76,1	...	76,1	...	...	...	15	...	15	...	15	...	...	...	...	...	...
			1902	...	...	...	†130,3	...	130,3	...	...	...	22	...	22	...	22	24·00	...	8·00	4·00	...	...
			1903	...	...	...	†154,6	...	154,6	...	...	...	25	...	25	...	25	24·00	...	8·00	4·00	...	...
9	(a)	Jorhat . .	Average ...	...	...	....	96,7	...	96,7	...	...	...	17	...	17	...	17	24·00	...	8·00	4·00	...	...
			1903 { 1st half	...	...	...	†76,6	...	76,6	...	...	...	13	...	13	...	13	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†79,0	...	78,0	...	...	...	12	...	12	...	12	...	...	...	...	...	...
		GRAND TOTAL	1899	526,2	2,352,1	5,232,6	140,321,1	132877	161,719,7	31,52	46,97	52,08	6,70,81	8,01	80939	54,26	9,22,58	12·59	5·32	3·07	2·30	...	2·51
			©†1900	521,1	2,284,7	5,703,3	153,954,2	138446	176,307,9	31,83	47,08	56,03	7,51,66	8,47	89507	63,04	10,26,44	12·59	5·49	3·13	2·31	...	2·51
			1901	532,4	2,404,6	6,669,8	170,415,8	147359	194,748,5	32,73	52,43	64,39	8,48,25	9,32	100717	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	2·48
			1902	562,6	2,530,5	6,813,2	171,715,9	150260	196,648,2	38,57	56,59	67,60	8,54,97	9,75	102748	68,31	11,75,08	12·86	5·21	3·11	2·33	1·41	2·51
			1903	593,8	2,579,6	7,214,3	184,292,2	155507	210,280,6	41,56	58,13	71,68	9,16,31	10,46	109814	71,52	12,54,40	13·21	5·54	3·09	2·33	1·48	2·51
			Average ...	547,2	2,430,3	6,326,6	164,139,8	144870	187,980,9	35,25	52,24	62,36	8,08,40	9,20	96745	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	2·51

* Information
† Total shown under 3rd class as

Appendix 15.
Coaching traffic.

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Number carried in hundreds. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.	Earnings in thousands. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total passenger earnings.	Parcel earnings.	Total earnings from coaching traffic.	Average rate charged per mile in pies. 1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Total.
		2' 6" Gauge—*concld.*	1899	...	...	...	326,3	...	326,3	...	...	...	59	...	59	...	59	...	...	...	...	...	...
			1900	...	...	...	393,4	...	393,4	...	...	...	67	...	67	...	67	...	...	...	...	...	...
			1901	2	8	8,0	401,4	8,6	419,0	...	...	...	66	2	68	1	71	21·91	10·55	4·44	3·01	4·25	3·22
			1902	4	9	11,0	403,6	12,6	428,5	...	...	...	66	2	70	...	72	...	...	...	...	...	...
			1903	1	1,4	12,8	403,3	9,6	427,2	...	...	...	66	2	70	1	72	...	...	...	...	...	...
33	(a)	Tarakeshwar-Magra.	Average ...	1	6	6,4	385,5	6,2	398,8	...	...	...	65	1	67	...	68	...	...	...	...	...	...
			1903 { 1st half	...	8	6,8	211,3	4,6	223,5	...	...	...	35	1	37	...	37	...	...	...	...	...	...
			1903 { 2nd half	1	6	6,0	192,0	5,0	203,7	...	...	...	31	1	33	1	35	...	...	...	...	...	...
			1899	...	...	...	136,8	...	136,8	...	...	...	37	...	37	...	37	...	...	...	...	...	...
			1900	...	...	...	144,9	...	144,9	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1901	2,5	...	7	163,6	9,0	146,0	...	...	...	27	...	27	...	31	...	...	...	...	...	...
			1902	2,3	...	3,1	111,0	9,0	125,4	...	...	...	29	...	29	...	34	...	...	...	...	...	...
			1903	2,8	...	3,9	128,9	9,3	144,9	3	...	1	29	1	34	...	38	...	...	...	...	...	...
34	(a)	Tezpur-Balipara	Averag ...	1,5	...	1,6	125,1	5,6	133,6	1	...	...	32	...	33	...	36	...	...	...	...	...	...
			1903 { 1st half	1,3	...	1,9	59,3	4,5	67,0	2	...	1	14	...	17	...	19	...	...	...	...	...	...
			1903 { 2nd half	1,5	...	2,0	69,6	4,8	77,9	1	...	...	15	1	17	...	19	...	...	...	...	...	...
		2' 0" Gauge.	1899	4,1	11,8	...	44,8	...	60,7	52	70	...	85	...	2,07	30	2,77	56·48	28·53	...	13·04	...	20·83
			1900	4,7	10,8	...	49,1	...	64,6	56	64	...	1,00	...	2,20	33	2,97	55·22	29·40	...	14·52	...	21·84
			1901	4,4	13,1	...	56,4	...	73,9	59	85	...	1,09	...	2,53	35	3,42	54·07	33·18	...	13·23	...	21·27
			1902	5,2	13,7	...	61,2	...	80,1	65	81	...	1,27	...	2,73	36	3,75	55·65	29·73	...	14·84	...	21·86
			1903	6,0	16,2	...	86,9	...	109,1	72	97	...	1,14	...	2,83	40	3,77	53·16	29·45	...	11·59	...	19·50
36	(a)	Darjeeling-Himalayan.	Average ...	4,9	13,1	..	59,7	...	77,7	61	79	...	1,07	...	2,47	35	3,34	54·80	30·06	...	13·44	...	21·07
			1903 { 1st half	3,3	8,4	...	38,8	...	50,5	40	48	...	52	...	1 40	18	1,84	*	*	*	*	...	*
			1903 { 2nd half	2,7	7,8	...	48,1	..	53,6	32	40	...	62	...	1,43	22	1,93	*	*	*	*	...	*
			1899	6	...	28,4	737,5	...	766,5	1	...	12	2,26	...	2,39	...	2,40	...	...	...	...	...	...
			1900	4	...	28,0	744,0	...	772,4	1	...	11	2,27	...	2,39	...	2,41	...	...	...	...	...	...
			1901	7	...	...	†762,4	...	762,4	1	...	12	2,25	...	2,38	...	2,39	...	...	...	...	...	...
			1902	...	...	...	†782,6	...	782,6	...	...	13	2,28	...	2,41	...	2,43	...	...	...	...	...	...
37	(a)	Howrah-Amta	1903	...	...	...	†808,3	...	808,3	...	...	...	2,50	...	2,50	...	2,52	...	...	...	...	...	...
			Average ...	2	...	11,3	767,0	...	778,4	1	...	10	2,31	...	2,41	...	2,43	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†411,3	...	411,3	...	...	...	1,28	...	1,28	...	1,29	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†397,0	...	397,0	...	...	...	1,22	...	1,22	...	1,23	...	...	...	...	...	...
			1899	5	...	14,0	275,8	...	290,3	1	...	4	64	...	69	...	69	...	...	...	...	...	...
			1900	4	...	12,2	286,3	...	298,9	...	...	4	66	...	70	...	71	...	...	...	...	...	...
			1901	...	...	...	†302,3	...	302,3	...	...	4	68	...	72	...	73	...	...	...	...	...	...
			1902	...	...	...	†313,7	...	313,7	...	...	5	69	...	74	...	74	...	...	...	...	...	...
38	(a)	Howrah-Sheakhalla.	1903	...	...	...	†343,0	...	343,0	...	...	...	77	...	77	...	78	...	...	...	...	...	...
			Average ...	2	...	5,2	304,2	...	309,6	...	...	3	69	...	72	...	73	...	...	...	...	...	...
			1903 { 1st half	...	...	...	†166,7	...	166,7	...	...	...	38	...	38	...	39	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†176,3	...	176,3	...	...	...	39	...	39	...	39	...	...	...	...	...	...
			1899	...	...	...	†62,0	...	62,0	...	...	...	12	...	12	...	13	...	...	...	...	...	...
			1900	...	...	...	†60,4	...	60,4	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1901	...	...	...	†76,1	...	76,1	...	...	...	15	...	15	...	15	...	...	...	...	...	...
			1902	...	...	...	†130,5	...	130,5	...	...	...	22	...	22	...	22	24·00	...	8·00	4·00	...	...
			1903	...	...	...	†154,6	...	154,6	...	...	...	25	...	25	...	25	24·00	...	8·00	4·00	...	...
9	(a)	Jorhat . .	Average ...	...	...	....	96,7	...	96,7	...	...	...	17	...	17	...	17	24·00	...	8·00	4·00	...	...
			1903 { 1st half	...	...	...	†76,6	...	76,6	...	...	...	13	...	13	...	13	...	...	...	...	...	...
			1903 { 2nd half	...	...	...	†79,0	...	78,0	...	...	...	12	...	12	...	12	...	...	...	...	...	...
			1899	526,2	2,352,1	5,232,6	140,321,1	132877	161,719,7	31,52	46,97	52,08	6,70,81	8,01	80939	54,26	9,22,58	12·59	5·32	3·07	2·30	...	2·51
			1900	521,1	2,284,7	5,703,3	153,954,2	138446	176,307,9	31,83	47,08	56,03	7,51,66	8,47	89507	63,04	10,26,44	12·59	5·49	3·13	2·31	...	2·51
		GRAND TOTAL	1901	532,4	2,404,8	6,669,8	170,415,8	147359	194,748,8	32,73	52,43	64,39	8,48,25	9,32	100717	63,60	11,41,88	12·75	5·49	3·09	2·31	1·41	2·48
			1902	562,6	2,530,5	6,813,2	171,715,9	150260	196,648,2	38,57	56,59	67,60	8,54,97	9,75	102748	68,31	11,75,08	12·86	5·21	3·11	2·33	1·41	2·51
			1903	593,8	2,579,6	7,214,3	184,292,2	155507	210,280,6	41,56	58,13	71,68	9,16,31	10,46	109814	71,52	12,54,40	13·21	5·54	3·09	2·33	1·48	2·51
			Average ...	547,2	2,430,3	6,326,6	164,139,8	144870	187,980,9	35,25	52,24	62,36	8,08,40	9,20	96745	64,15	11,04,08	12·80	5·41	3·09	2·32	1·43	2·51

* Information
† Total shown under 3rd class as

DIX 16—*contd.*

portion of Appendix 44 in Report for 1902.)

traffic.

17 and 20 of Report.)

Average rate charged per ton per mile in pies.					Average cost of carrying a ton of goods one mile in pies.	Average profit from carrying a ton of goods one mile in pies.	Average distance goods were carried.	Average load in a loaded goods vehicle per mile.	Average load in a goods vehicle per mile (including both loaded and empty).	Average number of vehicles in a goods train		Average weight in a goods train.			Percentage of freight upon capacity hauled.	Year.
General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Total.						Freight vehicles.	Total including brake-vans.	Freight.	Dead weight.	Total.		
							Miles.	Tons.	Tons	No.	No.	Tons.	Tons.	Tons.		
7·86	15·85	9·59	2·14	6·60	4·65	1·96	114·52	4·03	2·84	26·81	28·42	76·20	135·88	212·18	41·53	1899.
7·92	16·55	7·49	2·35	7·05	4·69	2·35	123·31	4·21	2·99	25·07	26·85	75·01	117·84	192·85	43·03	1900.
8·27	13·91	14·19	2·36	7·02	4·77	2·27	116·03	4·45	3·07	24·88	26·16	76·39	118·47	194·86	43·47	1901.
8·03	16·19	7·28	2·21	7·09	4·58	2·54	112·42	4·79	3·34	24·33	25·44	81·31	133·90	215·21	45·55	1902.
7·92	17·50	27·66	2·28	7·00	4·98	3·09	97·64	4·57	3·23	22·71	23·86	73·43	134·98	208·40	43·13	1903.
8·00	16 00	13·24	2·27	6·95	4·78	2 44	112·78	4·41	3·09	24·76	26·05	76·47	128·21	204·70	42·84	Average.
6·15			2·34	7·51	4·68	2·71	...	4·68	3·30	23·35	24·31	76·94	133·10	210·04	43·16	1st half 1903
7·02	17·64 17·32	... 27·36	2·23	6·81	5·35	1·33	...	4·43	3·16	22 01	23·35	69·55	137·05	206·60	43 09	2nd half
13 08				13 08	*	*	4 79									1899.
12·99	...	...	...	12·65	*	*	4·79									1900.
*	...	...	...	*	2·90	1·18	4 79									1901.
13 00	...	13·00	...	*	*	*	*									1902.
1·90	...	1·90	...	2·18	*	*	*									1903.
10·24	...	7·45	...	5·58	2·90	1·18	4·79	*	*	*	*	*	*	*	*	Average.
...	...	...	...	...	...	...	...									1st half 1903
...	...	...	...	...	...	...	...									2nd half
31·92	...	6·06	4·66	8·52	...	...	56·79									1899.
33·46	...	6·29	4·85	9·31	...	...	54·68									1900.
37·46	...	5·57	3·67	8·69	...	...	54·80									1901.
35·31	...	5·59	2·87	9·12	...	...	54·80									1902.
33 47	...	5 78	2·71	9·27	...	...	51·73									1903.
34·32	...	5·86	3·75	8 98	...	...	54·56	*	*	*	*	*	*	*	*	Average.
32·66	...	5·72	2·52	8·98	...	...	...									1st half 1903
34·18	...	5·84	3 16	8·67	...	...	...									2nd half
10·56	24·11	...	...	9·02	3·96	4·98	106·36	‡3·37	‡2·65	‡27·13	‡28·21	‡72·02	‡140·81	‡212·83	‡41·38	1899.
10·70	...	5·81	2·48	8·90	3·76	5·04	94 76	‡4·14	‡3·18	‡22·31	‡23·97	‡72·14	‡117·97	‡190·11	‡52·99	1900.
10·66	...	4·57	2 45	8·27	4·48	4·56	97·14	‡3·87	‡3·09	‡21·55	‡22·64	‡66·60	‡128·65	‡195·25	‡46·61	1901.
10·44	22·45	4·99	2·52	8·71	4·44	4·36	91·52	‡3·51	‡2·80	‡27·62	‡28·63	‡77·43	‡146·31	‡223·74	‡40·16	1902.
9·11	16 31	4·12	2·46	7·47	4·13	3·40	82·98	‡3·89	‡3·15	‡26·81	‡27·88	‡84·33	‡147·02	‡231·35	‡41 89	1903.
10·29	12·57	3·80	1·98	8·61	4·16	4·47	94·57	‡3 76	‡2 97	‡25 18	‡26·26	‡74·50	‡136·15	‡210·65	‡44·61	Average.
9 08	...	4 03	2·48	7·03	‡4 90	‡2 23	...	‡3·41	‡2·83	‡27 43	‡28·49	‡77·51	‡149·03	‡226·54	‡38·38	1st half 1903
9·13	16·31	4·31	2·45	7·80	‡3·66	‡4·24	...	‡4·35	‡3 43	‡26 27	‡27 27	‡90·16	‡145·30	‡235·46	‡44 91	2nd half
11·68	...	5·36	3·32	10·45	3·75	6·70	80·93	...	...	...	...	...	...	...	...	1899.
10·75	...	4·93	4·05	8·68	5·08	3·60	47·93	4·31	2·76	17·29	19·00	47·34	109·87	157·21	28·08	1900.
11·04	24·61	4·02	4·98	9·47	4·50	5·02	41·56	3·75	2·59	10·69	11·81	29·06	82·26	111·32	29·35	1901.
10·45	16·69	3·92	4·52	9·06	4·64	4·46	45·88	4·62	3·20	10·52	11·62	33·68	69·83	103·51	34·90	1902.
10·57	31·80	3·93	4·70	9·37	4·83	4·54	51·08	4·77	3·31	10·17	11·37	33 64	71·41	105·04	34·33	1903.
10·90	14 62	4·43	4·31	9·41	4·56	4·86	53·47	3·49	2·37	9·73	10·76	28·74	66·67	95·42	25·33	Average.
10·45	26 81	3·93	4·45	9·66	3·94	5·74	..	5·15	3·59	11·18	12·45	40·08	78·05	118·13	36 93	1st half 1903
10 82	36·41	3 89	4·95	8·93	6·34	2·64	...	4·23	2·92	9 04	10·16	26·39	63·94	90 33	30·05	2nd half
9·42	31·77	6·20	2·75	8·80	3·09	5·60	93·81	5·45	3·22	21·56	21·50	70·04	115·65	185·69	45·79	1899.
8·28	30·37	5·63	2·86	7·29	2·82	3·58	86·26	6·70	3·88	18·11	18·56	69·38	101·73	171·11	51·84	1900.
8·23	17·73	4·23	3·46	7·42	4·12	3·32	80·00	5·05	3 32	20·68	21 09	68·59	120·89	189·48	40·11	1901.
8·52	17·88	4·58	3·18	7·47	3·74	3·64	82·00	4·94	3·28	21·87	22·13	71·64	119·70	191·34	36·04	1902.
7 97	16 34	4·43	3·34	7·96	3·43	3·89	104·00	5 94	3·39	24 07	24 22	86·72	128 37	215 09	38·45	1903.
8·48	22·82	5 01	3·12	7·79	3 44	4·01	89·21	5·44	3·42	21 26	21·50	73·27	117·27	190·54	42·45	Average.
7·94	16·31	4 75	3·23	7·48	2·89	4·58	...	5·17	3·48	25·78	25·95	89·74	134·67	224·41	39·22	1st half 1903
8·02	16·35	4·21	3·42	7·05	3·97	3·21	...	4·92	3·30	22·35	22·48	73·69	122·06	195·75	36·67	2nd half
7·17	18·77	4·41	2·83	6·89	2·98	3·86	204·21	4·97	3·81	30·63	31·47	116·62	150·18	266·80	52·70	1899.
6·60	16·95	4·82	2·74	6·46	3·03	3 43	240·68	5 37	3·81	32 38	33·25	129 26	154·02	277·28	52·05	1900.
6·42	19·01	4·50	2 80	6·21	3·02	3·13	261 70	5·66	4·11	31·23	32·11	128·42	149·55	277·97	48 98	1901.
6·77	19·78	4·80	2·75	6·43	3·16	3·27	247·10	5·52	4·02	31·49	32·39	126·64	148 85	275·49	47·53	1902.
7·04	15·12	4·87	2·72	6·73	3·28	3·40	218·66	5·38	4·25	30·23	31·06	128·61	142·47	271·08	49 89	1903.
6·80	17·93	4·68	2·77	6·55	3·09	3·42	234·47	5·38	4·00	31·20	32·06	124·71	149·01	273·72	50·23	Average.
7·17	18·14	4·84	2·67	6·88	3·01	3·80	...	5·34	4·21	30·64	31·50	129·07	143·75	272·80	49·65	1st half 1903
6·85	12·50	4·91	2·78	6·55	3·62	2·89	...	5·44	4·31	29·68	30·46	127·99	140·77	268·76	50·22	2nd half
6·91	20·74	2·94	2·45	6·72	3·32	3 36	69·05	5·05	3·23	19·20	20·72	61·89	89·95	151·85	39 86	1899.
6·87	23·54	3·37	2·89	6·64	3·42	3 17	69·39	5·12	3·39	17·91	19·39	60·93	93·22	154·15	41·13	1900.
7·54	14·62	3·47	2·45	7·17	3·88	3·24	65·27	4·96	3 28	22·71	24·07	74·39	112·54	186·93	38·58	1901.
6·91	19·94	3·72	2·45	6·52	3·61	2·86	66·30	5·57	3·59	23·48	24·82	84·40	117·13	201·54	40·14	1902.
7·09	18·66	3 04	2·45	6·69	3·59	3·10	63 39	5·81	3·73	23 29	24·67	87·13	130·72	217·85	37·42	1903.
7·06	19·50	3·31	2·54	6·75	3·56	3·15	66·68	5·31	3·44	21·32	22·73	73·75	108·71	182·46	39·43	Average.
7·04	19·12	3·10	2·45	6·73	3·19	3·54	...	5·01	3·91	24·49	25·68	95·41	134·71	230·12	39·51	1st half 1903
7·19	16·33	2·94	2·45	6·65	3·99	2·66	...	5·60	3 55	22·18	23·66	78·85	126·74	205·59	35·34	2nd half
105·52	127·46	...	30·10	93 50	81·68	11 82	16·88	*	*	*	*	*	*	*	*	1899.
70·33	121·79	...	78·66	71·86	38·72	33·14	16·57									1900.
80·63	129·15	...	96·63	83·17	35·21	47·96	16·09	9·23	7·26	2·02	3·49	14·62	60·51	75·13	32·99	1901.
§34·16	141·00	57·54	§ 2·15	33·88	34·17	11·69	28·12	5·84	4·24	5·07	6·12	24·49	81·92	109·41	21·70	1902.
20 04	130·42	59·46	5·58	18·85	18·35	5·66	17·28	5·07	3·20	11·17	12·62	35·76	136·25	172·01	17 57	1903.
62·14	129·96	23·40	42·62	60·26	40·63	22·05	18·99	6·71	4·90	6·09	7·41	23·96	92·89	116·85	24·09	Average.
21·96	123·54	59·77	5·09	20·12	*	*	*	*	*	*	*	*	*	*	*	1st half 1903
18·38	136·88	59·14	6·17	18·02												2nd half

not available.
Bengal (5′ 6″ gauge) State railway.
Behar State railway.
inclusion of the transactions of the Shoranur-Cochin railway from 1902.

Appendix 16.

Goods traffic.

(Appendices 16, 17, 32 and

Goods

(Referred to in paragraphs

Number. Main head.	Number. Sub-head.	Railway including branches worked.	Year.	Quantity carried in thousands of tons. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Total.	Earnings in thousands of rupees. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Rents, miscellaneous, etc.	Total.
		3' 3½" gauge—*concld.*														
			1899	877	...	27	614	1	1,519	39,99	3	39	1,28	6	24	41,99
			1900	852	...	17	824	4	1,697	37,84	6	22	1,24	18	19	39,73
			1901	1,065	1	22	591	4	1,683	45,57	19	27	1,33	16	22	47,74
			1902	1,094	...	15	797	4	1,910	46,51	10	19	1,68	13	23	48,84
20	(a) to (e)	South Indian	1903	1,294	...	19	2,199	4	3,516	52,24	4	30	3,06	21	33	56,18
			Average	1,037	...	20	1,005	3	2,065	44,43	8	27	1,72	15	24	46,89
			1903 1st half	678	...	7	1,066	2	1,753	26,69	2	14	1,41	9	16	28,51
			1903 2nd half	616	...	12	1,133	2	1,763	25,55	2	16	1,65	12	17	27,67
			1899	942	1	3	148	...	1,094	50,02	10	11	3,71	12	18	54,24
			1900	841	1	2	150	2	996	51,41	13	12	3,87	13	23	55,89
			1901	801	2	2	161	1	967	44,26	19	13	3,72	12	22	48,58
			1902	860	3	4	147	2	1,016	51,25	42	21	3,96	16	26	56,26
21	(a) to (g)	Southern Mahratta	1903	925	2	7	154	1	1,089	53,62	30	33	3,50	21	22	58,18
			Average	874	2	4	152	1	1,033	50,10	23	18	3,75	15	22	54,63
			1903 1st half	509	1	2	68	1	581	29,75	14	12	1,68	10	12	31,91
			1903 2nd half	416	1	5	86	...	508	23,87	16	21	1,82	11	10	26,27
			1899	25	...	...	1	...	26	1,06	...	...	1	...	2	1,09
			1900	54	...	...	1	1	56	2,15	...	...	2	4	5	2,26
			1901	26	...	1	1	...	28	1,13	...	1	1	...	2	1,17
			1902	25	...	1	1	...	27	1,09	...	2	1	...	...	1,12
22	(a)	Udaipur Chitor	1903	14	...	1	...	...	15	64	...	1	...	...	1	66
			Average	29	...	1	1	...	31	1,21	...	1	1	1	2	1,26
			1903 1st half	9	...	1	...	...	10	39	...	1	...	...	...	40
			1903 2nd half	5	...	...	...	...	5	25	...	...	...	...	1	26
			1899	114	...	...	4	...	118	3,40	...	...	2	...	1	3,43
			1900	59	...	...	5	...	64	1,73	...	...	3	...	1	1,77
21	(h)	West of India Portuguese.*	1901	70	...	...	4	...	74	1,89	...	...	4	...	...	1,93
		2' 6" gauge.														
			1899	56	...	...	...	...	57	1,32	...	...	...	...	...	1,32
			1900	41	...	...	...	...	41	97	...	...	...	...	...	97
			1901	54	...	...	...	...	54	1,37	...	...	...	...	1	1,38
			1902	50	...	...	...	...	50	1,20	...	...	...	...	1	1,21
24	(a)	Barsi Light	1903	45	...	...	...	...	45	1,05	...	...	...	...	...	1,05
			Average	49	...	...	...	...	49	1,18	...	...	...	...	...	1,18
			1903 1st half	24	...	...	...	...	24	58	...	...	...	...	...	58
			1903 2nd half	21	...	...	...	...	21	47	...	...	...	...	...	47
			1903	7	...	...	...	...	7	9	...	...	...	...	...	9
25	(a)	Bukhtiarpore-Behar Light. †	1903 1st half	...	...	...	...	...	...	...	...	...	...	...	...	...
			1903 2nd half	7	...	...	...	...	7	9	...	...	...	...	...	9
			1903	...	...	...	2	...	2	1	...	1	5	...	...	7
28	(a)	Kalka-Simla §	1903 1st half	...	...	...	...	...	...	...	...	...	...	...	...	...
			1903 2nd half	...	...	...	2	...	2	1	...	1	5	...	...	7
			1899	39	...	1	1	...	41	1,58	...	7	1	...	1	1,67
			1900	48	...	1	1	...	50	1,62	...	2	1	6	3	1,74
			1901	27	...	...	2	...	29	98	...	1	2	...	...	1,01
			1902	19	...	...	...	...	19	70	...	...	...	...	1	71
30	(a)	Morvi	1903	19	...	...	...	...	19	68	1	...	...	...	...	69
			Average	30	...	...	1	...	31	1,11	...	2	1	1	1	1,16
			1903 1st half	11	...	...	...	...	11	44	...	...	...	...	...	44
			1903 2nd half	8	...	...	...	...	8	24	1	...	...	...	...	25
			1903	4	...	...	...	...	4	3	...	...	...	...	...	3
2	(c)	Parlakimedi Light	1903 1st half	1	...	...	...	...	1	1	...	...	...	...	...	1
			1903 2nd half	3	...	...	...	...	3	2	...	...	...	...	...	2
			1901	12	2	...	3	...	17	23	...	...	1	...	5	29
			1902	22	...	...	2	...	24	32	...	...	...	...	1	33
			1903	20	...	...	2	...	22	27	...	...	1	...	...	28
19	(c)	Powayan Light	Average	18	1	...	2	...	21	27	...	...	1	...	2	30
			1903 1st half	13	...	...	1	...	14	18	...	...	1	...	...	19
			1903 2nd half	7	...	...	1	...	8	9	...	...	...	...	...	9

* Included with the
† Opened for traffic from the 1st July 1903.
‡ Information not available.
§ Opened for traffic from the 9th November 1903.

DIX 16—*contd.*

portion of Appendix 44 in Report for 1902.)

traffic.

17 and 20 of Report.)

Average rate charged per ton per mile in pies.					Average cost of carrying a ton of goods one mile in pies.	Average profit from carrying a ton of goods one mile in pies.	Average distance goods were carried.	Average load in a loaded goods vehicle per mile.	Average load in a goods vehicle per mile (including both loaded and empty).	Average number of vehicles in a goods train.		Average weight in a goods train.			Percentage of freight upon capacity hauled.	Year.
General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Total.						Freight vehicles.	Total including brake-vans.	Freight.	Dead weight.	Total.		
							Miles.	Tons.	Tons.	No.	No.	Tons.	Tons.	Tons.		
9·49	22·95	5·46	2·50	8·74	4·85	3·89	60·73	3·92	2·90	18·88	19·49	54·70	110·81	165·01	46·35	1899.
9·48	22·96	5·67	2·44	8·69	4·51	4·18	62·19	4·20	3·23	18·97	19·52	61·33	109·59	170·92	56·12	1900.
8·83	26·02	6·38	2·46	8·23	4·01	4·26	65·89	4·71	3·59	19·47	20·06	69·93	112·34	182·27	55·72	1901.
8·09	26·49	5·67	2·48	7·49	3·93	3·60	65·22	4·94	3·73	19·70	20·34	73·46	114·11	187·57	56·35	1902.
8·11	22·53	6·48	2·44	7·19	3·36	3·87	42·45	5·04	3·78	21·06	21·74	79·56	120·20	199·76	54·59	1903.
8·80	24·19	5·92	2·46	8·07	4·13	3·93	59·30	4·56	3·45	19·62	20·23	67·80	113·31	181·11	52·69	Average.
8·04	21·29	5·87	2·49	7·27	3·16	4·11	...	5·12	3·89	20·99	21·66	81·61	119·69	201·30	56·36	1st half } 1903.
8·18	24·50	7·02	2·39	7·18	3·56	3·62	...	4·95	3·67	21·12	21·81	77·56	120·70	198·26	53·47	2nd half }
6·91	19·63	3·94	2·60	6·23	4·39	1·84	152·70	4·84	3·55	22·64	23·96	80·41	122·89	206·30	53·06	1899.
6·98	19·76	3·81	2·66	6·30	4·36	1·94	179·98	4·54	3·26	22·25	23·61	72·52	122·58	195·11	48·42	1900.
7·92	15·42	4·11	2·61	6·89	5·00	1·89	140·10	4·33	3·28	22·01	23·31	72·21	121·36	193·57	47·80	1901.
7·69	9·60	3·59	2·61	6·76	4·65	2·44	156·57	4·38	3·32	21·97	23·32	73·02	124·23	197·25	47·66	1902.
7·64	16·07	3·41	2·62	6·84	4·39	2·47	149·48	4·37	3·47	21·84	23·22	75·90	124·12	200·02	49·83	1903.
7·43	16·10	3·77	2·62	6·60	4·56	2·06	153·97	4·49	3·38	22·14	23·48	74·81	123·02	197·85	49·29	Average.
7·56	15·83	3·64	2·67	6·68	4·12	2·81	...	4·57	3·61	22·11	23·46	79·81	124·70	204·52	51·32	1st half } 1903.
7·74	18·30	3·30	2·58	6·74	4·71	2·38	...	4·15	3·33	21·56	22·90	71·72	123·50	195·22	47·10	2nd half }
15·98	32·20	...	2·72	15·69	6·56	8·76	51·19	3·79	2·47	25·12	25·52	55·56	128·15	183·72	30·53	1899.
15·01	33·15	9·24	3·02	14·97	5·15	9·37	52·11	4·30	2·57	26·65	26·90	68·71	131·55	200·27	35·58	1900.
14·29	32·90	2·74	3·53	13·60	6·52	7·21	57·91	4·75	2·69	25·37	25·37	68·53	129·46	197·99	37·08	1901.
14·34	34·86	2·72	5·36	13·89	6·29	7·56	57·41	4·85	2·74	24·13	24·13	67·53	124·70	192·23	34·32	1902.
17·91	34·67	2·72	2·72	16·35	8·26	8·27	51·03	3·34	2·12	21·42	21·42	45·50	120·95	166·45	26·34	1903.
16·51	33·38	3·48	3·47	14·91	6·56	8·22	53·93	4·31	2·47	24·54	24·67	61·17	126·96	188·13	32·77	Average.
17·64	33·59	2·72	2·72	16·41	7·88	8·67	...	3·47	2·14	23·08	23·08	49·42	126·22	175·64	26·42	1st half } 1903.
18·19	35·76	2·72	2·72	16·35	8·64	7·88	...	3·21	2·10	19·76	19·76	41·59	115·68	157·27	26·28	2nd half }
10·91	...	...	5·14	10·83	7·59	3·24	51·51	‡	‡	‡	‡	‡	‡	‡	‡	1899.
12·42	...	27·87	5·25	12·13	12·39	*+0·26*	43·53	‡	‡	‡	‡	‡	‡	‡	‡	1900.
11·43	...	...	3·71	10·96	11·92	*+1·72*	45·52	5·27	4·35	14·75	15·25	1·49	167·39	168·88	45·52	1901.
20·38	35·71	...	4·85	20·35	‡	‡	22·27									1899.
20·72	34·01	...	...	20·72	‡	‡	21·97									1900.
21·99	31·32	11·91	4·85	21·96	‡	‡	22·00	‡	‡	‡	‡	‡	‡	‡	‡	1901.
21·12	41·57	10·45	...	21·11	‡	‡	22·00									1902.
20·53	41·89	19·80	8·16	20·56	‡	‡	22·00	12·44	9·66	11·00	12·00	106·26	55·00	161·26	64·40	1903.
20·95	36·80	14·05	5·95	20·94	‡	‡	22·05	‡	‡	‡	‡	‡	‡	‡	‡	Average.
20·87	38·24	...	8·16	20·90	‡	‡	‡									1st half } 1903.
20·13	...	19·80	...	20·22	‡	‡	‡									2nd half }
‡	‡	‡	‡	‡	‡	‡	‡									1900.
								‡	‡	‡	‡	‡	‡	‡	‡	1st half } 1903.
																2nd half }
48·36	77·64	40·81	10·42	13·20	...	...	50·66									1903.
...	...	...	...	...	...	...	...									1st half } 1903.
48·36	77·64	40·81	10·42	13·20	...	...	50·66									2nd half }
13·54	28·21	13·68	3·22	13·30	7·48	5·82	58·41									1899.
10·50	23·52	10·02	7·60	10·75	7·93	2·77	62·07									1900.
11·36	20·41	11·13	4·61	11·14	7·56	3·58	60·81									1901.
11·22	26·53	13·43	7·58	11·26	6·75	4·51	63·04									1902.
12·76	30·85	12·62	7·56	12·82	6·33	6·49	54·53	‡	‡	‡	‡	‡	‡	‡	‡	1903.
11·88	25·90	12·18	6·11	11·85	7·22	4·63	59·77									Average.
13·39	29·23	11·74	7·61	13·37	...	...	...									1st half } 1903.
11·78	31·40	15·17	7·51	11·84	...	...	...									2nd half }
7·00	...	...	2·45	6·76	20·88	*−14·53*	21·45	2·83	2·26	6·07	7·05	13·72	56·69	70·41	27·62	1903.
7·44	...	...	2·45	7·11	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	1st half } 1903.
6·75	...	...	2·45	6·44												2nd half }
																1901.
																1902.
																1903.
‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	Average.
																1st half } 1903.
																2nd half }

Southern Mahratta railway after 1901.

Appendix 16.

Goods traffic.

(Referred to in paragraphs

Number. Main head.	Sub-head.	Railway including branches worked.	Year.	Quantity carried in thousands of tons. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Total.	Earnings in thousands of rupees. General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Live-stock.	Rents, miscellaneous etc.	Total.
		2′ 6″ gauge—*concld.*	1901							28	...	...	12	...	...	40
			1902							21	...	...	8	...	...	29
			1903							35	...	...	9	...	...	44
2	(*d*)	Raipur-Dhamtari	Average	†	†	†	†	†	†	28	...	...	10	...	...	38
			1903 1st half							24	...	...	3	...	...	27
			1903 2nd half							11	...	...	6	...	...	17
			1899	...	...	...	...	...	...	1	...	...	...	...	...	1
			1900	1	...	...	...	...	1	2	...	...	...	...	...	2
			1901	...	...	...	...	...	...	1	...	...	...	...	...	1
			1902	1	...	...	...	...	1	3	...	...	...	...	...	3
31	(*a*)	Ranaghat-Krishnagar Light.	1903	7	...	...	...	...	7	9	...	...	...	...	...	9
			Average	2	...	...	...	...	2	3	...	...	...	...	...	3
			1903 1st half	5	...	...	...	...	5	6	...	...	...	...	...	6
			1903 2nd half	2	...	...	...	...	2	3	...	...	...	...	...	3
			1899	6	...	...	...	...	6	6	...	...	...	...	...	6
			1900	8	...	...	...	...	8	9	...	...	...	...	...	9
			1901	8	...	...	...	...	9	9	...	...	...	...	...	9
			1902	10	...	...	1	...	11	8	...	...	1	...	1	11
33	(*a*)	Tarakeshwar-Magra Light.	1903	16	...	...	1	...	17	12	...	...	1	...	...	13
			Average	9	...	...	1	...	10	9	...	...	1	...	...	10
			1903 1st half	9	...	...	1	...	10	5	...	...	...	...	...	5
			1903 2nd half	7	...	...	...	...	7	7	...	...	1	...	...	8
			1899	9	...	...	...	...	9	52	...	...	...	...	...	52
			1900	9	...	...	...	...	9	50	...	...	...	...	...	50
			1901	7	...	1	...	...	8	44	...	1	...	...	...	45
			1902	6	...	2	...	...	8	40	...	4	...	...	...	44
34	(*a*)	Tezpur-Balipara Light	1903	6	...	3	...	...	9	42	...	8	...	...	...	50
			Average	7	...	1	...	...	8	45	...	3	...	...	...	48
			1903 1st half	2	...	1	...	...	3	13	...	1	...	...	...	14
			1903 2nd half	4	...	2	...	...	6	29	...	7	...	...	...	36
		2′ 0″ gauge.														
			1899	26	...	1	5	...	32	3,85	3	14	19	...	6	4,27
			1900	32	...	2	5	...	39	4,53	3	18	20	...	7	5,01
			1901	29	...	1	1	...	31	4,07	3	12	4	...	9	4,35
			1902	27	...	2	4	...	33	4,10	4	15	23	...	10	4,62
36	(*a*)	Darjeeling-Himalayan	1903	36	...	2	6	...	44	5,07	8	15	31	...	9	5,70
			Average	30	...	2	4	...	36	4,32	4	15	20	...	8	4,79
			1903 1st half	20	...	1	3	...	24	2,77	2	8	17	...	4	3,08
			1903 2nd half	16	...	1	3	...	20	2,30	6	7	14	...	5	2,62
			1899	7	...	...	...	...	7	11	...	...	...	...	...	11
			1900	9	...	...	...	...	9	15	...	...	...	...	...	15
			1901	14	...	...	...	...	14	21	...	...	...	...	...	21
			1902	14	...	...	...	...	14	22	...	...	...	...	...	22
37	(*a*)	Howrah-Amta Light	1903	17	...	...	...	...	17	25	...	...	...	...	...	25
			Average	12	...	...	...	...	12	19	...	...	...	...	...	19
			1903 1st half	8	...	...	...	...	8	12	...	...	...	...	...	12
			1903 2nd half	9	...	...	...	...	9	13	...	...	...	...	...	13
			1899	3	...	...	...	...	3	4	...	...	...	...	...	4
			1900	5	...	...	...	...	5	5	...	...	...	...	...	5
			1901	4	...	...	...	...	4	6	...	...	...	...	...	6
			1902	6	...	...	...	...	6	7	...	...	...	...	...	7
38	(*a*)	Howrah-Sheakhala Light.	1903	7	...	...	...	...	7	9	...	...	...	...	...	9
			Average	5	...	...	...	...	5	6	...	...	...	...	...	6
			1903 1st half	3	...	...	...	...	3	4	...	...	...	...	...	4
			1903 2nd half	4	...	...	...	...	4	5	...	...	...	...	...	5
			1899	21	...	...	...	...	21	83	...	...	...	...	...	83
			1900	15	...	...	...	...	15	73	...	...	...	...	...	73
			1901	12	...	...	...	...	12	67	...	...	...	...	...	67
			1902	12	...	...	...	...	12	63	...	...	...	...	...	63
39	(*a*)	Jorhat	1903	12	...	...	...	...	12	63	...	...	...	...	...	63
			Average	14	...	...	...	...	14	70	...	...	...	...	...	70
			1903 1st half	5	...	...	...	...	5	26	...	...	...	...	...	26
			1903 2nd half	7	...	...	...	...	7	37	...	...	...	...	...	37
			1899	23,902	59	6,221	9,459	107	39,748	16,10,55	13,11	1,80,41	94,11	13,99	7,65	19,19,82
			1900	25,548	58	7,309	9,820	161	42,896	16,96,35	13,78	2,11,71	93,32	18,70	8,66	20,36,52
			1901	25,458	63	8,249	9,528	94	43,392	17,58,14	14,97	2,35,01	96,41	15,44	8,70	21,23,67
		Grand total of all railways.	1902	25,840	100	8,034	11,487	76	45,537	17,40,72	21,67	2,26,75	1,14,93	15,13	9,95	21,28,41
			1903	26,202	114	8,565	12,721	82	47,684	18,53,45	23,07	2,29,93	1,13,90	18,07	9,24	22,41,92
			Average	25,390	79	7,676	10,603	104	42852	17,29,64	17,32	2,16,76	1,02,53	16,27	8,84	20,89,06

*Information

† Included with the

DIX 16.

portion of Appendix 44 in Report for 1902.]

traffic—concld.

17 and 20 of Report.)

Average rate charged per ton per mile in pies.					Average cost of carrying a ton of goods one mile in pies.	Average profit from carrying a ton of goods one mile in pies.	Average distance goods were carried.	Average load in a loaded goods vehicle per mile.	Average load in a goods vehicle per mile (including both loaded and empty).	Average number of vehicles in a goods train.		Average weight in a goods train.			Percentage of freight upon capacity hauled.	Year.
General merchandise.	Military stores.	Coal and coke for the public and foreign railways.	Revenue stores including coal and materials for construction.	Total.						Freight vehicles.	Total including brake-vans.	Freight.	Dead weight.	Total.		
10·42	...	...	5·21	8·18	6·37	1·81	36·64	4·41	3·08	8·18	9·28	25·18	41·67	66·85	58·72	1901.
9·74	...	...	3·87	6·95	6·46	0·53	43·96	4·86	3·28	9·24	10·75	30·32	41·71	72·03	60·22	1902.
10·13	...	...	2·77	6·66	7·87	—1·15	57·16	7·39	5·00	7·78	9 06	38·82	55·73	94·55	68·69	1903.
10·10	...	...	3·95	7·26	6·90	0·40	45·92	5·55	3·79	8·40	9·70	31·44	46·37	77·81	62·84	Average.
10·54	...	...	2·45	8·12	...	...	...	5·98	4·00	10·01	12·21	40·02	51·67	91·69	66·63	1st half } 1903.
9·30	...	...	2·93	5·28	6·47	—1·62	...	7·38	5·47	5·79	6·97	31·64	37·21	68·85	59·21	2nd half }
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1899. 1900. 1901. 1902. 1903. Average. 1st half } 1903, 2nd half }
...	...	...	...	...	...	...	...	...								1899.
...	...	...	...	...	...	...	...	...								1900.
20·88	...	...	6·00	26·83	...	...	13·49									1901.
...	...	...	...	...	...	...	...	*	*	*	*	*	*	*	*	1902.
...	...	...	...	...	...	...	...									1903.
...	...	...	...	...	...	...	...									Average.
...	...	...	...	...	...	...	...									1st half } 1903.
...	...	...	...	...	...	...	...									2nd half }
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1899. 1900. 1901. 1902. 1903. Average. 1st half } 1903. 2nd half }
65·01	139·37	46·45	33·40	62·87	*	*	40·78									1899.
62·35	120·78	43·70	35·91	60·63	*	*	41·71									1900.
64·48	132·98	38·95	36·61	63·30	*	*	41·65									1901.
66·85	143·56	37·01	41·44	63·74	46·92	16·20	41·41									1902.
59·64	118·98	41·46	41·90	58·07	41·58	16·38	42·41									1903.
63·67	131·13	41·51	37·85	61·72	44·25	16·29	41·59	*	*	*	*	*	*	*	*	Average.
59·64	122·16	41·16	43·62	49·64	*	*	*									1st half } 1903.
57·36	115·18	41·76	47·86	56·28	*	*	*									2nd half }
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1899. 1900. 1901. 1902. 1903. Average. 1st half } 1903. 2nd half }
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1899. 1900. 1901. 1902. 1903. Average. 1st half } 1903. 2nd half }
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1899. 1900. 1901. 1902. 1903. Average. 1st half } 1903. 2nd half }
				5·98			155·15									1899
				5·88			154·94									1900
				5·77			162·75									1901
...	...	...	...	5·68	...	...	157·54	...	...	...	...	...	...	...	...	1902
				5·64			159·93									1903
				5·79			158·06									Average.

not available.
Bengal-Nagpur railway.

Appendix 17.
Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and the

(Referred to in

Number.		Railway including branches* worked.	I. Apparel including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.		II. Coal and coke carried for the public and foreign railways.		1. Raw.		2. (a) Twist and yarn, European.		2. (b) Twist and yarn, Indian.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	25	241	24,678	27,947	128	772	516	1,374	3	16
2	(a), (b) & (d)	Bengal-Nagpur	335	7,782	1,176,814	17,41,099	14,438	1,85,527	1,140	8,971	14,499	1,72,727
3	(a), (c) to (f), (m) & (n).	Bombay, Baroda and Central India	545	13,141	37,047	1,73,896	168,828	18,71,123	278	5,441	12,466	1,75,638
4	...	Eastern Bengal State	1,492	18,882	339,029	2,57,848	1,270	8,142	2,685	22,008	4,323	26,202
5	...	East Indian	3,164	95,410	5,367,981	1,71,53,327	44,791	7,34,604	1,208	33,403	20,321	1,89,636
6	...	Great Indian Peninsula	1,284	52,609	155,070	3,84,718	351,594	84,47,784	8,788	1,75,293	15,189	1,73,788
7	(a) to (c)	Madras	233	6,327	399,726	9,89,762	88,347	4,23,898	4,195	45,326	13,046	1,10,281
8	(a) & (b)	Nizam's Guaranteed State	76	1,517	318,654	10,98,447	4,149	31,307	1,383	18,320	1,799	24,505
9	...	North Western State	3,956	93,824	64,668	1,95,041	92,845	13,57,134	1,786	41,574	6,240	93,381
10	...	Oudh and Rohilkhand State	1,054	11,421	43,045	1,73,968	6,418	46,875	2,951	23,457	9,215	69,621
		3′ 3½″ gauge.										
11	...	Assam-Bengal	260	3,524	16,106	40,363	1,165	6,704	690	2,972	112	1,044
12	...	Bengal and North-Western	825	10,124	60,278	1,24,933	1,093	11,506	675	8,222	4,228	43,916
13	...	Bengal-Dooars	53	252	12,592	23,583	...	...	...	...	54	227
14	...	Bhavnagar-Gondal-Junagad-Porbandar	394	4,132	2,742	4,572	32,542	1,70,254	29	207	1,133	5,690
15	...	Burma	451	8,167	28	34	1,644	12,956	4,384	81,325	325	3,949
16	...	Deoghur	...	...	1,615	440	...	...	...	...	40	12
17	...	Dibru-Sadiya	...	...	471,627	4,43,668	...	...	...	...	107	1,414
8	(c)	Hyderabad-Godavari Valley	43	1,426	6,597	30,953	23,879	3,06,357	271	5,106	881	15,292
18	...	Jodhpur-Bikaner	130	1,384	12,341	23,385	16,367	63,791	27	177	588	3,725
7	(d) & (e)	Madras	29	307	507	2,670	55	569	36	304	202	1,102
3	(b) & (g) to (l)	Rajputana-Malwa	736	21,040	19,772	69,488	89,551	12,79,890	165	1,752	12,611	3,29,727
19	(a) & (i)	Rohilkund and Kumaon	358	3,777	878	753	27	707	34	164	1,420	6,574
20	...	South Indian	191	3,619	19,256	30,448	28,249	1,68,215	2,576	20,912	10,606	87,257
21	...	Southern Mahratta	249	3,610	7,134	32,728	114,086	5,31,459	2,312	29,340	10,711	1,06,244
22	...	Udaipur-Chitor	9	91	...	...	715	2,966	3	18	26	182
		2′ 6″ gauge.										
24	...	Barsi Light	3	6	1	2	10,496	28,343	66	227	196	440
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	21	141	16	59	3,206	22,740	4	13	73	291
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	101	76
19	(c)	Powayan Light	...	...	...	...	...	...	...	...	100	185
31	...	Ranaghat Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	110	85	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	3,062	8,035	...	...	...	...	4	33
28	...	Kalka-Simla	1	20	44	655	...	...	...	...	...	...
		2′ 0″ gauge.										
36	...	Darjeeling-Himalayan	191	5,385	1,591	15,529	2	66	4	93	104	2,861
37	..	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		Total 1903	16,108	3,68,159	8,563,009	2,30,47,386	1,045,925	1,57,23,689	36,146	5,35,999	140,723	16,46,036
		Total 1902	15,358	3,52,383	8,026,590	2,26,76,009	914,004	1,35,69,180	38,141	5,41,152	139,444	16,07,701
		Increase	750	15,776	536,419	3,71,377	131,921	21,54,509	...	...	1,279	38,335
		Decrease	...	...	...	...	...	...	1,995	5,153	...	...

* Includes particulars relating to branches worked on different gauges to the main line in

DIX 17.

Appendix 17.

Principal commodities carried.

in Report for 1902.)

earnings therefrom during the calendar year 1903.

paragraph 21 of the Report.)

III.								IV.		V.								Number.
COTTON.										DRUGS.								
MANUFACTURED.								Chemicals, excepting saltpetre.		1. Intoxicating, other than opium.		2. NON-INTOXICATING.				TOTAL.		
(c) Piece-goods, European.		(d) Piece-goods, Indian.		(e) Others.		TOTAL.						(a) Medicinal preparations.		(b) Others.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
1,840	5,489	12	72	...	...	2,499	7,723	2	13	2	28	36	494	7	58	45	580	1
5,145	54,803	4,108	60,643	...	...	39,330	4,82,676	232	3,346	64	1,078	...	...	861	9,647	925	10,725	2
6,066	1,32,523	25,198	4,45,164	537	12,084	213,373	26,41,973	506	8,966	27	595	85	1,690	2,454	41,512	2,566	43,797	3
28,123	2,80,674	1,161	10,924	...	...	37,515	3,47,950	667	7,186	124	2,435	...	...	792	12,640	916	15,105	4
53,331	16,32,781	7,632	92,594	2,416	56,826	134,599	27,39,844	2,784	54,054	217	3,342	868	26,405	2,320	30,970	3,405	60,717	5
30,551	8,62,131	12,628	2,36,328	1,226	36,603	419,976	99,52,427	1,521	40,569	115	3,368	254	6,271	3,060	79,057	3,409	92,296	6
8,348	1,11,424	7,232	71,811	225	2,174	71,393	7,64,914	73	1,819	13	153	248	7,326	2,305	25,933	2,566	33,412	7
2,429	36,066	875	12,276	52	731	10,687	1,23,205	110	1,945	14	240	89	1,826	454	4,338	557	6,404	8
19,053	5,38,534	26,178	5,42,156	1,029	20,214	147,131	25,92,993	3,806	61,601	546	10,167	309	10,175	8,974	1,38,271	9,529	1,58,613	9
9,707	70,646	5,663	49,343	357	3,105	34,311	2,72,047	248	2,259	217	5,100	157	1,452	1,187	11,889	1,561	18,441	10
2,376	18,364	167	2,084	19	248	4,529	31,416	207	1,231	3	46	100	1,221	60	495	163	1,762	11
19,265	1,78,660	5,450	44,846	678	4,134	31,389	2,91,284	1,028	5,723	279	3,675	7	123	10,478	49,997	10,764	53,795	12
683	2,946	62	275	27	99	826	3,547	14	67	...	...	...	...	235	1,540	235	1,540	13
973	7,236	1,605	10,878	5	36	8,287	1,94,301	31	396	19	280	62	605	67	482	148	1,367	14
5,173	84,160	390	6,386	...	...	11,916	1,88,776	152	3,603	...	...	57	1,421	224	2,929	281	4,350	15
220	67	5	2	25	7	290	88	...	...	...	...	...	....	....	...	...	...	16
...	...	...	...	...	...	107	1,414	...	...	...	...	128	1,977	...	...	128	1,977	17
663	11,703	953	14,543	46	495	26,693	3,53,001	9	204	6	145	18	361	23	294	47	820	8
896	7,611	2,615	14,950	20	259	20,503	90,513	26	266	11	225	37	546	352	2,778	400	3,549	18
149	945	299	1,280	4	34	745	4,234	2	42	...	...	14	110	416	4,431	430	4,541	7
9,371	1,93,248	25,523	6,43,306	588	19,779	137,809	24,67,702	273	6,863	95	2,225	53	1,203	1,940	40,295	2,088	43,723	3
425	2,451	1,912	12,217	136	1,007	4,004	23,120	67	510	66	650	10	124	1,404	10,842	1,480	11,616	19
9,099	1,28,320	4,307	42,819	394	2,696	55,231	4,58,819	79	1,310	137	1,292	386	5,149	2,170	17,524	2,693	23,964	20
4,554	66,762	4,751	66,391	535	7,932	136,949	8,08,128	728	9,838	39	840	252	3,457	425	4,855	716	9,152	21
34	265	592	4,592	1	8	1,371	8,931	...	...	3	45	8	41	34	250	45	336	22
187	638	91	240	8	29	11,044	29,017	9	29	...	...	3	13	35	98	38	111	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
4	21	235	1,103	8	57	3,530	24,225	13	117	13	43	20	223	19	111	52	377	30
8	4	21	20	...	...	130	100	3	3	...	...	...	...	3	3	3	3	2
...	...	...	...	...	...	100	185	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
89	234	...	...	...	...	89	234	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	4	33	...	...	...	...	9	64	...	...	9	64	34
...	8	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	28
362	9,862	96	2,972	7	189	575	16,043	...	8	...	7	59	1,389	35	1,026	94	2,922	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
224,127	44,56,681	139,661	23,89,720	8,343	1,68,746	1,594,925	2,40,20,871	12,530	2,12,587	2,010	35,009	3,249	76,285	40,383	4,93,165	45,642	6,05,459	
221,172	43,24,258	136,361	23,43,676	6,747	1,41,657	1,455,869	2,25,27,624	10,637	1,89,151	1,937	34,354	2,517	57,789	38,119	5,13,799	42,573	6,05,922	
2,955	1,32,423	3,300	46,044	1,596	27,089	1,39,056	23,93,247	1,893	23,436	73	1,655	732	18,516	2,264	...	3,069	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20,634	...	463	

cases in which separate statistics have not been maintained.

Appendix 17.

Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and the

(Referred to in paragraph 21

Number. Main head.	Number. Sub-head.	Railway including branches* worked.	VI. Dyes and Tans. (1) Alizarine and aniline dyes. Quantity.	(1) Alizarine and aniline dyes. Earnings.	(2) Cutch. Quantity.	(2) Cutch. Earnings.	(3) Indigo. Quantity.	(3) Indigo. Earnings.	(4) Myrabolams. Quantity.	(4) Myrabolams. Earnings.	(5) Tanning barks. Quantity.	(5) Tanning barks. Earnings.	(6) Turmeric. Quantity.	(6) Turmeric. Earnings.	(7) Others. Quantity.	(7) Others. Earnings.	Total. Quantity.	Total. Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.																
1	...	Bengal-Central	...	...	...	2	...	...	...	...	5	26	513	2,040	5	54	523	2,122
2	(a), (b) & (d)	Bengal-Nagpur	...	...	...	...	...	..	23,585	1,98,293	...	...	4,737	39,261	2,245	12,243	30,547	2,49,797
3	(a) (c) to (f) & (m) & (n)	Bombay, Baroda and Central India.	947	22,874	142	1,232	37	689	109	1,395	1,053	12,713	3,107	61,989	2,704	52,485	8,098	1,53,377
4	...	Eastern Bengal State	...	...	370	2,997	109	1,136	...	...	...	...	2,094	12,287	271	3,422	2,844	19,842
5	...	East Indian	307	5,797	1,413	15,971	2,354	59,615	4,949	34,987	3,577	10,091	5,416	95,684	3,952	43,141	21,968	2,65,286
6	...	Great Indian Peninsula	1,884	69,923	979	18,301	266	7,583	34,254	2,87,214	10,843	53,489	11,048	1,55,011	2,626	40,488	61,900	6,32,009
7	(a) to (c)	Madras	410	5,873	22	132	1,843	25,252	2,075	11,610	18,198	1,24,058	9,342	62,547	799	8,383	32,689	2,37,855
8	(a) & (b)	Nizam's Guaranteed State.	230	2,733	26	185	8	112	246	1,127	2,823	16,87 9	203	2,293	130	1,516	3,666	24,845
9	...	North Western State	540	18,787	32	269	1,487	34,188	310	3,916	620	2,024	4,092	59,797	7,203	1,02,345	14,493	2,21,225
10	...	Oudh and Rohilkhand State.	108	1,074	405	3,181	94	1,284	258	1,889	585	2,941	1,773	20,449	729	4,604	3,952	35,363
		3′ 3⅜″ gauge.																
11	...	Assam-Bengal	...	...	41	144	...	...	3	10	...	...	24	165	16	237	84	556
12	...	Bengal and North-Western.	71	946	1,412	9,030	1,574	14,061	93	669	332	1,979	3,320	29,300	1,065	6,644	7,867	62,629
13	...	Bengal-Dooars	...	...	...	...	...	...	...	...	...	...	4	15	10	47	14	62
14	...	Bhavnagar-Gondal-Junagad Porbandar.	117	829	10	49	3	23	116	479	1	5	267	1,335	325	1,902	839	4,622
15	...	Burma	...	...	5,463	58,588	...	3	62	814	183	968	1,178	8,416	42	551	6,928	69,340
16	...	Deeghur	...	...	...	...	...	...	...	...	...	...	20	6	...	...	20	6
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley.	15	274	67	1,099	83	1,563	55	102	297	578	282	3,240	64	721	863	7,579
18	...	Jodhpur-Bikaner	28	115	...	16	88	1,342	8	26	312	3,755	230	1,554	296	2,107	962	8,915
7	(d) & (e)	Madras	...	...	...	...	...	...	4	12	6	32	29	82	21	59	60	185
3	(b) & (g) to (z)	Rajputana-Malwa	788	29,108	224	2,859	501	5,169	328	3,416	2,526	16,166	3,013	48,043	2,541	63,286	9,921	1,68,047
19	(a) & (b)	Rohilkund and Kumaon.	10	104	463	2,331	10	62	21	149	641	2,236	471	2,506	71	505	1,687	7,892
20	...	South Indain	603	7,751	235	1,663	411	3,639	517	3,049	5,150	40,135	2,585	20,172	1,577	13,931	11,083	90,340
21	...	Southern Mahratta	228	3,176	238	1,986	209	2,001	2,960	12,426	12,650	33,068	9,702	58,633	604	5,274	26,591	1,16,564
22	...	Udaipur-Chitor	10	65	2	15	6	52	6	24	1	2	74	534	38	304	137	996
		2′ 6″ gauge.																
24	...	Barsi Light	7	26	31	71	1	2	4	10	...	1	163	449	33	95	239	654
25	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	2	10	1	1	1	10	3	8	...	...	8	36	69	295	84	360
2	(c)	Parlakimedi Light	...	...	...	...	...	...	48	41	44	32	33	27	...	...	125	105
19	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	Kalka-Simla	1	17	...	...	...	...	...	...	...	...	...	...	...	...	1	17
		2′ 0″ gauge.																
36	...	Darjeeling-Himalayan	...	...	2	68	...	3	...	...	...	...	2	57	8	215	12	343
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1903	6,320	1,69,462	11,578	1,20,188	9,095	1,57,792	69,993	5,61,496	60,047	3,21,183	63,730	6,85,928	27,444	3,64,854	248,197	23,80,923
		Total 1902	4,681	1,16,458	7,138	75,177	9,739	1,67,063	81,730	6,12,760	68,638	3,53,731	77,606	8,71,778	28,602	3,86,132	278,134	25,83,079
		Increase	1,639	53,044	4,440	45,011	...	...	...	...	...	...	...	...	...	...	...	...
		Decrease	...	...	...	...	654	9,271	11,737	51,264	8,591	32,548	13,876	1,85,850	1,158	21,278	29,937	2,02,156

* Includes particulars relating to branches worked on different gauges to the main line

DIX 17—*continued.*

Appendix 17.

in Report for 1902.)

Principal commodities carried.

earnings therefrom during the calendar year 1903.

of the Report.)

VII. Fodder: (1) Oil-cake. Quantity.	VII. Fodder: (1) Oil-cake. Earnings.	VII. Fodder: (2) Hay, straw and grass. Quantity.	VII. Fodder: (2) Hay, straw and grass. Earnings.	VII. Fodder: Total. Quantity.	VII. Fodder: Total. Earnings.	VIII. Fruits and vegetables, fresh. Quantity.	VIII. Fruits and vegetables, fresh. Earnings.	IX. Grain and Pulse: (1) Grain and pulse. Quantity.	IX. Grain and Pulse: (1) Grain and pulse. Earnings.	IX. Grain and Pulse: (2) Jawar and Bajra. Quantity.	IX. Grain and Pulse: (2) Jawar and Bajra. Earnings.	IX. Grain and Pulse: (3) Rice in the husk. Quantity.	IX. Grain and Pulse: (3) Rice in the husk. Earnings.	IX. Grain and Pulse: (4) Rice not in the husk. Quantity.	IX. Grain and Pulse: (4) Rice not in the husk. Earnings.	Number. Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
1,692	3,219	43	108	1,735	3,327	5,843	15,941	6,090	9,305	...	...	2,588	4,902	4,706	12,532	1
3,953	18,189	1,158	7,005	5,111	25,194	7,640	56,285	37,836	1,96,821	...	...	39,779	1,31,315	123,038	9,30,334	2
11,766	87,964	44,765	2,37,692	56,531	3,24,756	22,352	1,19,509	45,550	2,68,395	20,239	94,327	6,152	27,686	20,735	2,40,769	3
5,408	11,549	21,196	31,525	26,605	43,074	7,917	41,134	55,200	1,97,896	...	...	38,349	3,15,606	100,874	3,60,466	4
32,260	1,67,023	16,181	60,253	49,441	2,17,276	11,481	1,30,787	268,778	18,77,869	13,627	53,334	20,769	76,374	139,497	7,51,906	5
12,311	64,478	42,510	4,26,074	54,821	4,90,552	26,283	2,37,464	194,185	24,15,548	138,768	17,76,427	1,497	5,917	91,205	6,94,361	6
6,051	34,316	1,618	5,045	9,669	39,361	12,969	81,643	86,348	4,99,383	31,821	96,558	34,863	2,58,257	211,945	9,66,551	7
440	2,388	1,609	2,605	2,049	6,493	2,780	24,280	12,767	63,255	44,731	1,33,168	2,619	15,249	60,302	5,07,904	8
9,649	40,573	39,815	2,25,935	49,464	2,66,508	20,937	1,53,800	784,205	11,93,224	116,013	5,81,969	18,957	67,932	125,873	7,52,324	9
4,028	17,986	5,999	33,690	10,027	51,676	9,965	45,516	69,002	3,14,492	15,894	69,870	1,941	7,246	21,735	1,78,174	10
709	3,064	634	2,523	1,343	5,587	1,322	6,021	2,834	17,241	2	11	1,063	3,351	41,891	1,09,942	11
7,028	23,963	3,891	30,078	10,919	53,946	6,033	27,954	109,722	4,33,749	1,883	6,844	44,504	1,33,613	195,499	9,49,316	12
22	89	200	671	222	760	61	268	4,916	11,614	...	...	721	997	6,579	13,963	13
499	3,090	74	166	573	3,256	5,218	23,305	3,544	9,791	30,215	1,09,796	135	351	8,983	32,929	14
1,774	7,603	302	1,577	2,076	9,180	26,591	1,94,373	16,848	1,14,414	363	1,502	464,416	22,17,030	63,935	3,37,650	15
15	5	...	...	15	5	...	...	219	53	...	...	25	9	55	19	16
...	...	...	...	...	...	...	...	1,563	12,593	...	...	...	...	15,489	1,31,034	17
1,390	5,755	95	327	1,485	6,142	166	1,230	6,363	51,777	3,049	8,940	97	283	12,193	51,421	8
56	196	1,402	10,422	1,458	10,618	1,196	6,990	7,891	46,033	43,662	2,98,410	2,313	6,932	30,966	1,26,995	18
52	427	12	133	64	566	597	1,803	1,749	4,306	134	208	4,531	7,997	20,413	85,160	7
5,631	21,955	6,033	84,710	11,964	1,06,665	22,968	1,54,915	79,923	7,20,848	61,319	4,47,837	2,136	13,079	58,021	4,22,934	8
540	1,865	1,865	9,398	2,345	11,263	4,262	31,901	32,339	84,628	3,046	8,992	2,815	9,725	6,262	16,442	19
37,443	1,39,875	364	1,451	37,842	1,41,326	34,350	1,83,464	55,440	2,80,854	8,582	50,393	96,192	2,27,676	136,663	4,35,889	20
2,341	43,304	5,577	38,716	12,918	82,020	9,965	59,269	69,147	3,00,681	41,049	1,76,893	15,102	64,013	84,996	4,08,845	21
2	5	...	...	2	5	91	536	833	3,066	136	284	...	2	843	3,870	22
3	8	61	136	64	144	32	84	1,635	8,502	7,732	19,423	52	116	1,200	2,789	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
3	10	101	308	104	318	123	555	371	919	2,955	6,622	46	137	490	1,392	30
43	36	8	7	51	43	50	42	630	555	...	...	216	148	540	496	2
...	...	...	...	...	...	...	...	371	615	...	...	...	...	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
1,243	1,892	...	...	1,243	1,892	1,561	1,220	25	25	...	...	2,563	1,922	62	711	33
322	1,527	...	...	322	1,527	...	...	272	1,308	...	...	...	...	497	1,949	34
...	...	...	...	...	...	...	...	9	135	...	...	...	...	5	66	35
1	14	22	696	23	710	117	2,485	932	12,115	...	...	16	163	15,903	1,71,732	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
156,981	6,91,873	193,525	12,12,117	350,506	19,03,990	248,127	15,96,279	1,356,589	91,46,462	634,429	39,11,668	925,388	36,76,981	1,675,842	84,41,396	
143,385	6,04,457	186,639	9,27,841	330,024	15,32,298	230,815	14,72,360	1,308,947	88,72,543	591,668	32,85,230	1,058,503	43,77,028	1,488,949	81,44,993	
13,596	87,416	6,886	2,84,276	20,482	3,71,692	12,302	23,919	47,642	2,73,919	...	...	...	...	186,901	2,96,403	
...	...	...	...	...	...	...	...	...	...	257,239	13,54,863	133,205	7,00,047	...	...	

In cases in which separate statistics have not been maintained.

Appendix 17.

Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and the

(Referred to in para

Number. Main head.	Number. Sub-head.	Railway including branches* worked.	IX. GRAIN AND PULSE—concld. (5) Wheat. Quantity.	(5) Wheat. Earnings.	(6) Wheat flour. Quantity.	(6) Wheat flour. Earnings.	(7) Other. Quantity.	(7) Other. Earnings.	Total. Quantity.	Total. Earnings.	Hides (a) Dressed or tanned. Quantity.	Hides (a) Dressed or tanned. Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	1	4	325	1,004	..	...	11,770	27,647	...	...
2	(a), (b) & (d)	Bengal-Nagpur	45,261	2,69,313	3,799	20,744	12,533	83,261	268,246	16,31,366	...	...
3	(a) & (c) to (f) (m) & (n)	Bombay, Baroda and Central India	75,977	5,11,102	6,450	49,773	42,448	3,70,241	226,551	15,62,343	399	6,930
4	...	Eastern Bengal State	2,192	9,359	6,430	38,880	1,675	4,878	252,720	8,97,085	...	...
5	...	East Indian	436,454	28,05,799	30,496	1,97,486	88,410	3,51,995	1,032,231	61,04,002	857	10,657
6	...	Great Indian Peninsula	252,813	29,80,141	16,952	1,75,062	14,798	1,55,043	760,128	82,00,343	974	10,125
7	(a) to (c)	Madras	3,028	13,775	2,937	11,854	31 306	1,79,724	452,148	20,16.087	2,023	25,559
8	(a) & (b)	Nizam's Guaranteed State	4,600	24,448	2,433	13,495	643	1,502	128,195	8,14,060	6	82
9	...	North Western State	977,817	1,33,51,733	47,955	2,29,383	31,995	1,71,542	1,502,620	1,63,29,083	140	1,506
10	...	Oudh and Rohilkhand State	287,624	13,44,3 1	10,331	56,674	40,392	1,65,567	487,019	21,07,084	17	97
		3′ 3¾″ gauge.										
11	...	Assam-Bengal	75	579	1,130	6,739	78	394	47,093	1,38,272	...	...
12	...	Bengal and North-Western	86,997	5,35,765	3,466	21,937	123,760	5,24,733	563,421	25,05,957	6	43
13	...	Bengal-Dooars	...	...	585	2,201	...	...	14,801	28,765	...	...
14	...	Bhavnagar-Gondal-Junagad-Porbandar	21,766	80,040	210	892	6,006	17,235	70,859	2,51,024	9	52
15	...	Burma	670	3,492	4,874	41,745	1,790	10,580	572,896	27,25,973	61	724
16	...	Deeghur	100	31	59	14	...	...	440	126	...	...
17	...	Dibru-Sadiya	...	...	...	...	465	3,710	17,517	1,47,324	...	...
8	(c)	Hyderabad-Godavari Valley	2,939	32,751	444	4,255	139	739	25,213	1,79,866	2	34
18	...	Jodhpur-Bikaner	31,334	1,20,800	807	3,566	16,395	89,535	132,708	6,34,261	15	162
7	(d) & (e)	Madras	46	259	578	4,579	3,384	19,946	39,826	92,445	14	87
3	(b) & (g) to (l)	Rajputana-Malwa	151,962	13,77,176	12,555	94,239	96,884	5,54,880	462,850	36,31,052	73	547
19	(a) & (b)	Rohilkund and Kumaon	66,620	1,24,618	1,063	4,079	14,692	40,283	128,871	2,87,762	727	3,245
20	...	South Indian	964	4,865	1,297	7,917	12,064	58,586	307,597	10,64,170	815	8,453
21	...	Southern Mahratta	12,845	76,872	4,931	25,619	10,111	39,855	201,881	11,11,807	10	77
22	...	Udaipur-Chitor	2,404	10,161	15	86	707	1,644	4,938	19,093	...	...
		2′ 6″ gauge.										
24	...	Barsi Light	1,416	3,034		24	43	98	12,178	25,971	...	...
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	2,541	5,337	37	140	1,149	2,780	7,598	16,733	2	8
2	(c)	Parlakimedi Light	13	9	4	3	256	183	1,715	1,392	...	...
19	(c)	Powayan Light	1,062	1,420	...	...	748	1,215	2,181	3,250	...	...
31	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	111	132	...	...	2,781	2,190	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	679	3,148	...	...
28	...	Kalka-Simla	...	...	1	10	...	...	15	211	...	...
		2′ 0″ gauge.										
36	...	Darjeeling-Himalayan	22	461	1,123	24,332	246	3,158	16,642	2,11,961	...	16
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		Total 1903	2,469,552	2,36,87,705	161,397	10,55,834	533,114	28,52,417	7,756,318	5,27,71,853	6,150	68,404
		Total 1902	1,860,627	1,63,59,522	142,780	8,85,604	788,253	49,45,378	7,539,816	4,88,50,998	4,846	57,826
		Increase	608,925	73,28,183	18,617	1,70,230	...	...	216,502	39,20,855	1,304	10,578
		Decrease	...	...	...	...	255,139	20,92,961	...	...	...	...

* Includes particulars relating to branches worked on different gauges to the main line

DIX 17—*continued.*

in Report for 1902.)

earnings therefrom during the calendar year 1903.

graph 21 of the Report.)

X. HIDES AND SKINS. (1) OF CATTLE. (b) Raw. Quantity.	(b) Raw. Earnings.	(2) SKINS OF SHEEP AND OTHER ANIMALS. (a) Dressed or tanned. Quantity.	(a) Earnings.	(b) Raw. Quantity.	(b) Earnings.	TOTAL. Quantity.	Earnings.	XI. Horns. Quantity.	Earnings.	XII. Hemp (Indian) and other fibres, excluding jute. Quantity.	Earnings.	XIII. JUTE. (1) Raw. Quantity.	Earnings.	(2) Gunny bags and cloth. Quantity.	Earnings.	TOTAL. Quantity.	Earnings.	NUMBER. Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
596	3,445	...	...	83	597	679	4,042	...	...	348	1,555	99,710	3,78,023	220	1,054	99,930	3,79,077	1
9,115	78,731	...	...	...	...	9,115	78,731	747	4,576	6,369	44,340	...	...	13,016	1,34,215	13,016	1,34,215	2
1,757	22,507	22	408	1,617	23,002	3,795	52,847	55	890	819	7,455	317	3,795	8,988	68,991	9,305	72,786	3
25,707	1,61,469	...	...	1,331	6,787	27,038	1,08,256	293	885	2,215	12,816	642,879	44,70,717	16,925	74,589	659,804	45,45,306	4
19,229	2,82,165	464	5,752	8,744	1,32,825	29,294	4,31,339	592	6,768	25,639	1,70,335	106,339	4,76,963	58,959	7,59,818	160,298	12,36,781	5
3,414	48,855	57	1,021	8,266	89,673	12,711	1,47,674	1,027	17,232	15,429	2,35,382	1,207	23,741	27,302	2,79,578	28,509	3,03,319	6
4,702	42,136	5,480	66,778	21,841	1,97,049	34,046	3,31,522	457	4,123	4,047	17,816	363	2,833	13,921	93,980	14,284	96,813	7
251	3,118	79	1,188	2,033	20,520	2,399	24,508	208	1,649	268	3,817	8	108	2,920	24,485	2,928	24,593	8
9,785	1,17,308	121	1,619	10,099	1,18,756	20,145	2,39,189	448	3,914	691	5,127	109	1,143	39,370	2,95,632	39,479	2,96,780	9
4,786	30,535	...	11	2,492	12,751	7,295	43,394	646	2,457	8,500	29,003	472	3,103	13,424	76,507	13,896	79,610	10
607	5,072	...	...	32	315	639	5,387	6	52	67	248	63,938	1,45,818	916	4,507	64,854	1,49,825	11
7,244	47,267	54	445	3,037	20,108	10,341	67,858	128	996	2,331	7,605	1,746	11,092	19,852	1,29,381	21,598	1,38,473	12
162	596	...	...	...	...	162	596	...	...	...	...	15,433	37,590	53	121	15,486	37,711	13
363	2,6	23	224	254	1,601	640	4,544	3	9	3	20	...	1	2,205	7,617	2,205	7,618	14
1,502	13,919	10	98	44	337	1,617	15,078	46	656	1	38	42	605	11,024	44,986	11,066	45,591	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	45	23	45	23	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
88	1,076	1	10	804	8,345	895	9,465	21	300	98	1,025	2	12	1,963	17,394	1,965	17,406	8
974	10,643	15	71	545	3,255	1,549	14,131	1	6	28	79	38	212	2,958	10,090	2,996	10,302	18
73	373	37	170	527	1,695	651	2,325	5	17	36	149	...	...	391	1,639	391	1,639	7
2,845	34,376	21	241	3,377	34,694	6,316	69,553	67	651	1,490	12,905	1,239	11,209	12,799	82,928	14,038	94,137	3
...	...	...	...	356	1,706	1,093	4,951	77	400	2,310	10,121	6	34	3,295	9,643	3,301	9,677	19
2,034	14,752	1,437	22,775	5,610	38,706	9,926	79,686	153	1,021	2,581	30,379	38	655	12,430	52,962	12,468	53,617	20
846	8,298	128	745	6,584	44,924	7,568	54,039	244	2,195	1,933	16,766	6	56	8,609	56,716	8,615	56,772	21
3	10	...	4	105	690	108	704	...	...	79	379	...	...	126	584	126	584	22
8	26	...	...	69	155	77	181	2	4	30	81	...	...	915	2,166	915	2,166	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
105	416	1	3	31	161	139	588	2	8	...	1	...	2	160	560	160	562	30
346	298	...	...	...	...	346	298	...	...	...	...	...	...	28	25	28	25	2
...	...	...	...	...	...	...	...	...	...	364	746	...	...	...	...	...	...	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	15	64	15	64	...	...	...	...	950	902	...	...	950	902	33
...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...	1	3	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	10	1	10	28
246	3,253	...	16	5	65	251	3,305	5	109	...	...	3	82	219	2,732	222	2,814	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
96,738	8,71,188	7,950	1,01,579	77,961	7,53,779	183,849	17,94,950	5,141	48,927	75,766	6,03,688	934,846	55,68,204	269,034	22,22,933	1,203,880	77,91,137	
83,554	8,04,063	8,365	90,466	71,812	7,27,443	163,577	16,79,797	5,887	63,373	71,815	5,55,228	968,396	63,43,163	250,978	20,72,941	1,219,374	84,16,104	
13,234	67,125	....	11,113	6,149	26,337	20,272	1,15,153	...	...	3,921	53,460	...	...	17,056	1,49,992	...	...	
...	...	415	...	...	...	...	...	746	14,946	...	...	33,550	7,74,953	...	...	16,494	6,24,967	

in cases in which separate statistics have not been maintained.

Appendix 17.
Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and the earnings

(Referred to in paragraph

Number.		Railway including branches* worked.	XIV.		XV.									
					LEATHER.						LIQUOR			
			Lac.		(1) Unwrought.		(2) Wrought, excepting boots and shoes.		Total.		(1) Ale and beer.		(2) Wines and spirits of all kinds including country spirit.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.												
1	...	Bengal Central	...	...	...	...	...	...	...	...	1	7	32	389
2	(a) (b) & (d)	Bengal-Nagpur	7,013	50,384	761	4,205	...	...	764	4,705	922	3,163	743	7,387
3	(a) (c) to (f) (m) & (n)	Bombay, Baroda and Central India	442	1,266	767	11,288	949	17,565	1,716	28,853	1,545	18,345	2,642	25,447
4	...	Eastern Bengal State	1,542	9,409	...	...	...	...	...	...	415	4,805	1,264	18,602
5	...	East Indian	22,925	3,39,214	1,071	42,807	295	7,727	1,366	50,534	7,485	68,678	2,471	71,851
6	...	Great Indian Peninsula	820	7,903	639	7,816	1,385	27,566	2,024	35,382	9,325	1,26,372	4,903	98,459
7	(a) to (c)	Madras	299	2,371	443	3,551	479	8,893	922	12,444	2,999	35,190	4,757	40,952
8	(a) & (b)	Nizam's Guaranteed State	19	263	680	9,524	139	1,801	819	11,325	1,456	13,111	268	3,842
9	...	North-Western State	993	14,209	1,270	16,174	2,301	43,546	3,571	59,720	7,744	76,503	4,536	1,33,549
10	...	Oudh and Rohilkhand State	1,320	10,093	100	1,898	107	1,225	207	3,123	5,132	19,617	2,368	32,250
		3′ 3½″ gauge.												
11	...	Assam-Bengal	818	4,567	...	...	12	119	12	119	95	834	179	2,217
12	...	Bengal and North Western	2,251	13,607	80	432	175	1,230	255	1,662	77	570	208	2,537
13	...	Bengal-Dooars	...	...	...	...	...	...	...	...	...	...	78	497
14	...	Bhavnagar-Gondal-Junagad-Porbandar	12	61	194	1,091	34	290	228	1,381	25	128	160	1,514
15	...	Burma	1,448	21,360	38	484	88	1,523	126	2,007	3,228	30,029	685	13,883
16	...	Deoghur	100	32	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	54	829
8	(c)	Hyderabad-Godavari Valley	24	260	29	196	63	651	92	787	15	86	36	473
18	...	Jodhpur-Bikaner	997	8,910	165	1,611	20	240	185	1,851	34	390	67	830
7	(d) & (e)	Madras	...	...	...	...	...	2	...	2	861	3,851	192	1,764
3	(b) & (g) to (l)	Rajputana-Malwa	916	8,936	1,107	14,249	466	6,710	1,573	20,959	3,160	26,397	973	15,933
19	(a) & (b)	Rohilkund and Kumaon	213	1,050	6	38	39	303	45	341	1,203	6,854	186	2,260
20	...	South Indian	301	1,628	2	24	26	353	28	376	435	3,500	3,444	26,557
21	...	Southern Maharatta	39	195	723	6,290	228	2,261	951	8,551	1,154	10,250	2,746	21,263
22	...	Udaipur-Chitor	5	30	16	107	25	123	41	230	2	17	3	26
		2′ 6″ gauge.												
24	...	Barsi Light	...	1	...	...	4	10	4	10	...	...	8	23
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	3	9	25	122	21	113	46	235	3	11	10	92
2	(c)	Pathakimedi Light	...	...	...	...	...	...	...	...	...	...	15	11
19	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	...	...	...	...	23	150
28	...	Kalka-Simla	...	...	...	...	...	...	...	...	...	...	...	10
		2′ 0″ gauge.												
36	...	Darjeeling-Himalayan	1	32	...	7	6	169	6	176	523	5,012	137	4,112
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1903	42,501	4,95,790	8,119	1,22,353	6,862	1,22,420	14,981	2,44,773	47,839	4,53,720	33,198	5,27,709
		TOTAL 1902	33,936	391,956	8,696	1,21,751	6,718	1,13,264	14,814	2,35,015	50,900	4,56,392	28,089	4,81,017
		INCREASE	8,565	1,03,834	23	602	144	9,156	167	9,758	...	...	5,099	46,692
		DECREASE	...	...	...	...	...	...	...	...	3,061	2,672	...	...

* Includes particulars relating to branches worked on different gauges to the main line

DIX 17—*continued.*

Appendix 17.
Principal commodities carried.

in Report for 1902.)
therefrom during the calendar year 1903.
21 of the Report.)

(3) All other sorts, including toddy and fermented liquor other than ale and beer.		Total.		XVII—(contd. on following page).														Number.
				METALS.														
				(1) Brass, unwrought.		(2) Brass, wrought.		(3) Copper, unwrought.		(4) Copper, wrought.		(5) IRON AND STEEL.						
												(a) Cast.		(b) Unwrought.		(c) Wrought.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
...	...	33	396	12	65	376	1,029	...	...	23	53	6	24	...	...	413	2,038	1
...	...	1,665	10,560	...	....	1,093	10,748	...	...	229	4,305	515	7,051	...	...	20,831	28,301	2
170	1,703	4,357	45,495	1,650	22,311	796	11,835	986	13,710	314	5,037	660	7,362	973	8,500	17,982	1,96,948	3
...	...	1,679	23,407	401	3,408	2,350	25,308	218	3,880	299	3,321	1,102	10,421	103	385	22,242	1,55,051	4
94	699	10,050	1,41,228	1,700	25,320	7,627	91,404	431	11,587	1,070	28,239	11,835	1,13,882	20,614	37,809	44,132	5,37,890	5
28	265	14,256	2,25,096	2,713	79,476	2,818	52,457	1,333	26,029	1,205	27,138	3,212	62,452	13,312	2,16,792	32,106	6,10,553	6
2,424	8,807	10,160	84,949	1,126	9,361	1,044	9,114	182	1,854	104	694	2,135	7,760	1,563	10,542	15,404	1,39,822	7
1,538	6,369	3,257	23,322	183	1,520	206	2,188	43	279	86	897	377	3,383	2,190	15,387	1,006	10,911	8
164	1,866	12,444	2,11,018	951	10,493	1,621	22,235	264	3,262	705	11,633	4,513	77,462	1,456	13,467	45,172	7,36,882	9
...	...	7,500	51,867	58	275	3,535	26,043	130	634	235	1,666	1,423	8,158	26	82	14,537	82,816	10
...	...	274	3,051	14	159	233	1,831	...	2	14	76	63	499	29	187	1,769	10,481	11
...	...	285	3,167	159	1,268	1,705	13,353	27	199	152	1,231	1,025	6,654	252	1,405	7,650	39,839	12
...	...	78	497	...	...	25	84	...	...	6	31	19	99	...	...	916	3,544	13
...	...	185	1,642	302	939	270	1,801	147	670	88	683	79	481	187	789	969	6,067	14
33	319	3,946	44,231	56	738	237	3,327	13	262	95	1,365	318	3,620	63	507	4,255	39,913	15
...	...	...	...	10	3	29	6	...	...	...	...	49	18	65	25	...	...	16
...	...	54	329	...	...	...	...	...	...	...	...	1,689	14,577	...	...	...	...	17
3	17	54	576	9	64	95	1,018	3	39	23	240	52	634	76	583	2,536	26,289	
26	186	127	1,406	24	113	142	1,252	16	150	67	470	29	246	136	727	1,671	12,429	18
25	275	1,078	5,390	5	15	7	22	17	38	6	21	19	187	77	498	315	2,373	
30	319	4,163	42,640	1,841	44,002	1,758	18,818	375	26,579	344	4,543	1,724	11,070	1,557	13,461	14,248	1,54,703	3
2	18	1,391	9,130	27	106	421	2,193	5	34	51	357	134	492	185	678	2,689	14,224	19
432	1,820	4,861	31,677	1,293	9,498	906	9,520	160	1,479	70	902	803	9,850	2,216	10,619	8,644	68,810	20
4,391	21,825	8,291	53,338	222	2,840	1,129	11,766	192	2,225	556	6,572	612	6,780	4,941	27,921	5,357	44,294	21
...	...	5	43	5	33	10	75	1	4	2	15	...	...	1	4	124	898	22
...	...	8	23	8	25	31	92	5	17	18	56	7	18	128	301	535	1,259	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
11	89	24	192	29	137	29	156	3	10	5	24	40	260	1	2	147	633	30
...	...	16	11	...	...	6	5	...	...	...	...	...	...	...	...	32	24	2
...	...	...	...	...	...	...	...	...	...	...	...	203	341	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	23	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	2	35	28
...	...	669	9,124	...	11	57	1,322	...	...	18	493	101	2,527	...	6	496	13,981	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
9,416	44,566	90,443	10,25,995	13,798	2,12,170	28,547	3,19,004	5,171	90,923	5,695	1,00,262	32,735	3,56,305	50,201	3,60,267	266,420	28,87,379	
10,143	56,067	99,132	9,93,476	11,915	1,64,925	27,499	3,06,187	4,330	74,257	6,788	1,13,460	29,189	3,02,780	50,438	3,30,495	264,597	28,22,768	
...	...	1,311	32,519	1,883	47,245	1,048	12,817	841	16,666	...	...	3,546	53,525	...	29,772	1,813	64,611	
727	11,501	...	...	...	...	...	...	...	...	1,026	13,198	...	...	237	...	...	...	

in cases in which separate statistics have not been maintained.

Appendix 17.

Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and

(Referred to in

Number.		Railway including branches* worked.	XVII. Metals—*concluded.* (5) Iron and steel—*concluded.* (d) Manufactures.		(6) Others.		Total.		XVIII. Oils. (1) Kerosine.		(2) Castor.		(3) Cocoanut.		(4) Mustard and rape.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	28	235	504	2,351	1,362	5,793	2,372	5,712	2	11	193	420	1,248	3,177
2	(a), (b) & (d).	Bengal-Nagpur	2,291	32,426	164,192	3,04,801	189,151	4,37,632	19,468	1,86,511	687	5,152	790	5,310	...	...
3	(a), (c) to (f), (m) & (n)	Bombay, Baroda and Central India	7,706	114,561	4,218	44,867	35,285	4,25,131	12,369	1,45,858	968	7,388	827	10,964	378	2,110
4	...	Eastern Bengal State	4,143	38,825	2,559	24,487	33,327	2,63,066	1,36,589	2,81,091	285	1,609	1,543	14,971	4,211	38,143
5	...	East Indian	16,091	2,06,937	5,989	1,16,043	109,469	11,69,051	71,385	7,03,264	2,451	15,769	2,221	19,737	4,491	41,516
6	...	Great Indian Peninsula	18,522	3,89,015	106,713	8,36,367	182,934	22,00,278	47,085	6,59,833	958	9,534	2,649	44,294	29	603
7	(a) to (c)	Madras	10,711	1,04,516	2,293	21,172	34,565	3,04,335	29,043	2,07,252	5,415	13,375	2,913	30,469	181	1,376
8	(a) & (b)	Nizam's Guaranteed State	855	11,219	518	6,754	5,464	52,538	4,409	29,411	337	3,004	81	960	1	9
9	...	North Western State	8,097	1,47,503	2,874	51,186	65,653	10,74,214	20,033	3,79,062	247	3,190	754	9,434	2,034	12,411
10	...	Oudh and Rohilkhand State	2,903	19,903	966	5,903	23,813	1,45,480	15,762	87,955	216	935	104	500	1,108	4,770
		3′ 3½″ gauge.														
11	...	Assam-Bengal	940	6,518	1,103	9,206	4,168	28,909	10,371	33,992	22	140	39	294	525	3,610
12	...	Bengal and North Western	4,462	31,239	2,496	18,656	17,958	1,13,841	16,482	65,233	443	2,838	185	1,314	648	5,970
13	...	Bengal-Dooars	491	2,940	674	3,200	2,131	9,898	1,975	6,951	...	...	2	9	346	1,718
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	442	2,683	187	1,154	2,671	15,267	3,395	14,296	206	991	117	543	145	383
15	...	Burma	7,035	74,500	248	2,782	12,320	1,27,024	7,754	69,790	95	1,192	632	6,788	4	91
16	...	Deoghur	...	...	...	...	155	52	48	25	...	...	5	2	...	...
17	...	Dibru-Sadiya	...	...	544	4,586	2,233	19,163	...	...	...	...	...	...	6,061	19,328
8	(c)	Hyderabad-Godavari Valley	649	6,731	165	2,014	3,608	37,642	1,511	12,678	42	426	140	1,392	2	41
18	...	Jodhpur-Bikaner	173	1,118	147	955	2,605	16,451	578	2,513	295	2,336	13	42	7	61
7	(d) & (e)	Madras	393	3,452	197	1,963	1,036	8,569	687	3,161	24	56	212	635	1	4
3	(b) & (g) to (l).	Rajputtana-Malwa	3,928	66,097	4,375	57,530	30,750	3,96,592	8,951	77,438	1,260	8,104	462	10,343	453	4,050
19	(a) & (b)	Rohilkund and Kumaón	306	1,855	302	1,998	4,120	21,937	2,031	6,131	58	288	10	58	41	244
20	...	South Indian	4,652	53,357	1,381	14,675	20,145	1,78,700	23,555	1,23,796	4,223	27,608	951	5,646	101	797
21	...	Southern Mahratta	2,821	31,469	716	8,183	16,576	1,42,052	21,637	1,33,663	461	2,325	1,757	11,178	1	8
22	...	Udaipur-Chitor	59	327	27	187	229	1,343	295	1,079	9	77	3	16	...	...
		2′ 6″ gauge.														
24	...	Barsi Light	125	342	8	28	365	2,133	413	932	4	10	78	224	...	...
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	78	426	16	84	348	1,732	81	207	37	124	6	22	16	47
2	(c)	Parlakimedi Light	8	7	9	9	55	45	179	118	...	...	...	...	...	...
19	(c)	Powayan Light	...	...	...	...	203	341	...	...	...	...	...	...	...	...
31	...	Ranaghat Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	4	16	...	...	4	16	56	59	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	468	446	68	446	...	...	...	...	...	...	39	272
28	...	Kalka-Simla	1	19	...	...	3	54	...	...	...	...	...	2	...	...
		2′ 0″ gauge.														
36	...	Darjeeling-Himalayan	1,075	23,901	27	632	1,774	40,876	768	11,768	8	54	7	174	385	5,843
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1903	98,989	13,72,137	303,502	15,42,229	805,048	72,40,576	459,191	32,57,858	18,748	1,06,534	16,694	1,75,741	22,456	1,56,582
		Total 1902	98,647	12,73,277	289,031	14,61,267	782,434	68,49,416	436,674	31,39,137	19,919	1,13,842	16,773	1,70,006	12,529	1,06,965
		Increase	342	98,860	14,471	81,962	22,614	3,91,160	22,217	1,18,721	...	...	...	5,735	9,927	49,617
		Decrease	...	...	...	...	...	...	...	...	1,171	7,308	79	...	...	...

* Includes particulars relating to branches worked on different gauges to the main

DIX 17—*continued.*

in report for 1902.)

the earnings therefrom during the calendar year 1903.

paragraph 21 of the Report.)

(5) Others.		Total.		XIX (continued on following page). OIL-SEEDS. (1) Castor.		(2) Earthnuts.		(3) Linseed.		(4) Poppy.		(5) Rape and mustard.		(6) Til or jinjili.		(7) Cotton seed.		NUMBER.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
...	4	3,815	9,824	...	...	...	...	1,294	3,091	...	...	3,193	6,959	320	787	...	...	1
1,919	13,263	22,864	2,10,236	...	...	...	...	4,157	25,253	...	...	5,296	31,478	31,471	2,90,165	...	...	2
2,649	28,889	17,191	1,95,209	20,159	1,84,477	639	6,989	7,620	74,016	17,426	1,48,395	50,512	3,99,173	25,861	2,26,812	...	...	3
1,235	5,256	1,43,862	3,41,070	794	1,211	...	...	14,952	48,107	...	...	23,277	88,892	151	583	...	...	4
2,412	35,491	82,960	3,18,777	33,167	2,06,233	136	1,283	2,56,832	18,05,016	38,729	3,19,177	206,147	15,04,851	23,785	1,59,964	28,664	134,462	5
9,559	1,04,562	60,280	8,18,926	54,770	3,92,396	6,287	60,445	1,45,969	18,39,47[illegible]	25,085	3,45,278	71,141	9,77,292	165,292	19,55,242	151,130	1,678,991	6
6,498	37,047	44,051	2,89,519	32,249	1,44,242	3,249	15,035	226	794	112	676	793	5,963	28,867	1,46,966	...	...	7
426	3,473	5,254	36,857	66,200	3,65,559	70	531	5,208	10,241	140	707	33	265	19,340	1,19,345	...	...	8
3,713	38,674	26,781	4,52,791	153	1,172	104	1,834	4,569	69,507	1,015	7,014	23,968	1,53,826	28,584	1,68,014	75,390	360,240	9
858	5,058	18,048	93,218	3,214	11,647	97	475	36,278	1,37,853	19,193	89,257	46,222	1,87,295	8,102	37,275	...	...	10
189	1,436	11,146	39,472	48	176	...	...	454	1,138	...	...	816	2,996	661	2,611	68	228	11
419	2,022	18,177	78,277	7,267	33,380	5	17	127,257	5,82,765	6,902	35,068	51,965	2,69,578	1,313	6,271	...	...	12
8	5	2,331	8,683	...	...	...	...	...	...	...	...	577	914	...	...	...	...	13
286	1,907	4,149	17,520	4,265	12,310	101	694	4	20	13	59	1,444	1,913	5,427	19,048	5,702	13,313	14
9,676	77,384	18,161	1,55,245	2	8	448	3,345	1	12	...	...	2	33	5,796	45,517	...	...	15
55	18	108	43	23	7	...	...	10	3	5	2	20	6	5	3	...	...	16
...	...	6,061	19,329	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
1,836	16,972	3,531	31,509	433	2,336	46	423	26,635	1,73,620	66	480	22	204	2,676	14,007	13,920	92,434	8
488	2,759	1,381	7,711	...	...	12	69	3	13	15	76	5,057	22,203	18,774	81,866	...	...	18
787	3,298	1,711	7,154	3	19	10	45	...	...	...	...	7	12	229	372	...	...	7
1,601	14,191	12,727	1,14,126	19,717	50,533	276	2,876	9,098	60,858	20,437	1,51,334	57,413	4,53,034	23,233	1,13,264	...	...	8
98	756	2,238	7,477	2,732	7,499	6	24	11,258	26,629	2,304	4,011	10,481	28,934	1,445	4,188	...	...	19
9,789	36,884	38,619	1,99,729	13,218	54,617	170,727	2,83,578	14	28	41	410	1,087	5,015	26,461	1,67,222	...	...	20
4,623	27,185	28,479	1,74,359	13,181	86,904	2,912	14,527	6,626	31,020	494	4,883	428	2,620	31,723	2,44,259	25,226	128,531	21
3	18	220	1,159	...	...	2	24	1	5	541	1,416	...	...	332	786	...	...	22
55	154	550	1,380	418	895	32	84	8,851	18,818	16	38	77	167	580	1,244	1,163	2,477	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
36	162	176	562	3	8	6	29	1	2	2	5	...	1	655	1,675	445	1,120	30
7	8	186	126	...	...	...	...	...	...	...	...	14	11	10	8	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
268	313	324	372	...	...	...	...	...	...	...	...	222	292	...	...	...	...	33
...	...	39	272	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
42	1,071	1,205	18,910	...	...	2	56	...	9	...	...	6	100	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
59,536	4,58,558	5,76,625	41,55,273	2,72,016	15,55,629	185,167	3,92,378	667,838	49,08,370	1,32,716	10,99,286	550,220	41,44,084	451,113	38,07,494	301,708	24,11,826	
55,490	4,34,224	5,41,685	39,64,174	2,43,941	13,44,997	180,029	2,91,320	497,872	35,40,300	91,201	7,40,556	562,165	41,13,306	341,213	26,97,892	291,746	23,62,021	
4,046	24,334	34,940	1,91,099	28,075	2,10,642	54,238	31,058	179,966	13,68,076	41,515	359,730	...	30,778	109,900	11,09,602	9,962	49,805	
...	...	...	...	...	...	...	...	...	...	...	...	1,945	...	...	...	...	...	

line in cases in which separate statistics have not been maintained.

Appendix 17.
Principal commodities carried.

(Appendices 15 and 19.

Principal commodities carried by railways and

(Referred to in

Number.		Railway including branches* worked.	XIX				XX		XXI		XXII			
			Oil-seeds—*concld.*								Provi			
			(8) Others.		Total.		Opium.		Paper and pasteboard.		(1) Dried fruits and nuts.		(2) Ghee.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	14	35	4,821	10,872	3	22	168	1,349	245	739	47	214
2	(a)(b)&(d)	Bengal-Nagpur	15,005	77,146	55,929	4,24,042	54	1,754	999	15,060	6,410	69,667	2,787	35,298
3	(a), (e) to (f), (m) & (n).	Bombay, Baroda and Central India.	14,528	1,42,007	138,745	11,81,929	2,359	87,049	1,804	29,925	18,618	2,04,715	5,092	65,034
4	...	Eastern Bengal State	255	1,005	39,429	1,39,788	29	339	7,265	42,573	597	2,080	1,117	11,382
5	...	East Indian	9,427	59,229	596,887	41,90,295	8,843	2,10,439	9,482	1,71,012	6,841	92,014	19,136	4,03,454
6	...	Great Indian Peninsula	16,130	1,44,873	635,824	73,93,995	653	26,258	3,194	54,380	37,292	6,17,305	15,226	2,13,470
7	(c) to (e)	Madras	29,384	1,67,498	94,880	4,81,164	53	1,724	1,071	15,204	12,572	55,166	4,795	43,608
8	(a) & (b)	Nizam's Guaranteed State	4,510	17,876	95,501	5,14,524	30	1,196	527	6,336	7,982	65,882	529	5,141
9	...	North-Western State	46,697	4,33,486	180,490	11,95,093	89	1,135	2,840	50,172	23,041	4,09,879	11,102	1,17,467
10	...	Oudh and Rohilkhand State	9,631	39,736	123,237	4,94,538	2,218	30,159	1,941	12,887	1,818	17,118	3,657	20,131
		3′ 3½″ gauge.												
11	...	Assam-Bengal	8	45	2,055	7,194	...	2	143	677	174	1,041	156	1,196
12	...	Bengal and North-Western	10,393	40,261	205,162	9,07,335	7,305	1,17,280	2,337	6,825	1,428	16,898	3,556	28,229
13	...	Bengal-Deccan	...	...	577	914	...	...	...	...	10	21	6	31
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	...	...	16,956	47,357	8	105	168	1,187	3,469	15,014	1,431	8,440
15	...	Burma	...	...	6,249	48,915	25	389	415	6,109	1,054	11,260	805	13,412
16	...	Deoghur	50	14	113	35	...	...	...	...	...	...	25	7
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley	2,233	12,545	46,031	2,86,084	...	...	217	3,707	1,598	20,625	638	7,892
18	...	Jodhpur-Bikaner	7,198	14,803	31,059	1,19,033	33	454	89	926	2,639	11,736	3,993	31,528
7	(d) & (e)	Madras	1,373	3,122	1,622	3,570	...	...	6	55	23	209	155	678
3	(b) & (g) to (l).	Rajputana-Malwa	7,394	35,576	137,598	8,67,475	3,949	62,890	1,499	24,665	13,204	1,81,961	7,062	79,764
19	(a) & (b)	Rohilkund and Kumaon	124	446	28,440	71,791	211	2,045	107	319	247	1,675	326	1,445
20	...	South Indian	2,209	13,903	2,13,777	5,24,773	...	...	1,980	36,810	1,018	6,249	1,999	11,046
21	...	Southern Mahratta	12,322	87,743	92,912	6,00,487	3	53	636	7,972	25,432	1,77,198	4,684	36,158
22	...	Udaipur-Chitor	...	2	876	2,233	113	675	36	225	403	1,999	360	1,526
		2′ 6″ gauge.												
24	...	Barsi Light	317	702	11,454	24,429	...	...	44	135	609	1,675	26	75
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	117	310	1,229	3,150	8	98	90	535	140	565	59	225
2	(c)	Parlakimedi Light	200	169	224	188	...	...	...	...	...	...	...	...
19	(c)	Powayan Light	536	795	536	795	...	...	...	...	...	...	...	...
31	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	222	292	...	...	...	...	...	...	5	13
34	...	Tezpur-Balipara	15	121	15	121	...	...	...	...	...	...	...	...
28	...	Kalka-Simla	...	...	...	...	...	...	...	...	...	7	...	...
		2′ 0″ gauge.												
36	...	Darjeeling-Himalayan	1	9	9	183	...	7	70	1,919	13	329	18	362
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
36	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
32	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1903	190,071	12,93,518	2,760,949	1,96,12,591	25,990	5,44,063	37,165	4,56,664	168,513	19,82,618	88,142	11,36,236
		Total 1902	207,351	14,37,661	2,356,418	1,65,28,043	20,603	4,43,314	36,853	4,33,292	149,856	17,37,266	81,792	11,07,205
		Increase	...	...	404,531	30,84,548	5,387	1,00,749	330	23,672	18,657	2,45,352	6,350	29,031
		Decrease	17,280	1,44,143	...	...	...	...	...	...	...	...	...	...

*Includes particulars relating to branches worked on different gauges to the main lin

DIX 17—*continued.*

Appendix 17.
Principal commodities carried.

in report for 1902.)

the earnings therefrom during calendar year 1903.

paragraph 21 of the Report.)

	XXIII														XXIV		
sions.	Railway plant and rolling-stock carried for the public and foreign railways.														Salt.		Number.
(3) Others.		Total.		(1) Locomotives, engines and tenders and parts thereof.		(2) Carriages and trucks and parts thereof.		(3) Materials. (a) Steel rails and fish-plates.		(b) Sleepers and keys of steel and cast-iron.		(c) Others.		Total.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
215	1,313	507	2,316	...	...	...	...	...	...	...	...	...	...	...	...	3,855	8,928	1
3,868	50,563	15,005	1,54,528	430	3,981	3,078	18,040	1,118	13,473	1,141	13,143	42,850	2,60,143	54,620	3,08,760	99,851	5,85,354	2
20,739	1,34,199	44,449	4,03,949	317	2,646	725	3,842	5,090	28,216	19	79	22,093	62,172	28,184	91,955	1,57,228	5,03,986	3
10,764	77,812	12,188	91,274	369	105	3,030	1,336	5,750	5,481	3,186	2,196	3,948	16,786	16,283	19,884	76,956	3,60,997	4
74,629	7,71,580	1,00,605	12,67,049	1,172	6,501	6,637	29,096	18,932	1,59,508	3,089	12,688	3,13,144	5,64,775	3,42,974	7,12,568	230,005	16,62,522	5
37,052	3,58,071	89,570	11,88,846	203	2,118	171	892	7,282	65,339	3,239	25,094	4,408	23,012	15,403	1,14,436	179,515	17,47,231	6
33,197	5,89,237	100,864	6,88,011	123	1,355	174	1,124	689	2,872	1,117	9,196	1,628	12,342	3,681	26,789	88,609	4,16,873	7
2,757	15,686	11,275	86,659	3	38	...	...	493	1,742	3	22	...	...	499	1,802	31,960	1,70,709	8
10,370	1,66,621	45,113	6,93,967	...	...	32	1,677	3,163	8,750	...	...	131,266	5,09,567	134,461	5,18,994	107,015	7,17,934	9
1,276	11,746	6,751	48,995	30	264	...	1	1,193	2,376	374	803	11,889	27,103	13,476	30,547	65,941	2,89,173	10
6,067	43,832	6,417	46,069	...	1	...	...	2,100	2,906	...	...	1,356	1,213	3,456	4,120	9,670	29,658	11
23,103	89,408	28,092	1,34,535	...	...	...	...	...	...	...	...	...	...	...	...	108,200	4,26,803	12
536	1,927	552	1,979	...	...	...	...	...	...	...	...	1,307	1,053	1,307	1,053	4,557	9,163	13
5,192	27,731	10,082	51,785	60	212	...	...	1	1	...	...	10	96	71	309	5,240	8,445	14
41,570	3,94,764	43,429	4,09,546	...	...	...	...	1,347	17,086	...	...	...	...	1,347	17,086	18,951	1,68,742	15
...	...	25	7	...	...	...	...	...	...	...	...	...	...	...	...	2,715	4.1	16
398	3,626	398	3,626	...	...	...	...	...	...	...	...	...	...	...	...	609	4,934	17
4,100	20,208	8,544	48,725	208	1,703	262	2,115	9	87	...	...	61	542	540	4,447	9,704	80,981	8
1,115	4,542	7,758	47,806	218	553	118	356	7,778	28,315	1,116	4,353	4,783	6,897	13,993	40,474	25,517	1,41,127	18
4,017	17,957	4,195	18,835	30	120	175	725	147	311	...	...	23	77	375	1,233	1,162	3,091	7
10,073	69,260	30,439	3,31,005	40	920	110	1,180	1,743	12,369	555	5,978	78,035	49,154	80,513	1,10,101	245,303	24,15,970	3
520	4,779	1,023	7,599	...	...	...	...	8	23	...	...	8,269	26,574	8,277	26,597	18,449	35,116	19
30,267	1,79,253	32,684	1,96,548	39	322	480	1,035	6,318	14,239	6,097	15,004	2,381	7,404	15,315	28,601	77,899	2,95,120	20
19,363	1,12,371	49,484	3,24,727	...	7	59	607	2,003	9,663	9	44	184	319	2,265	11,946	50,371	3,75,652	21
479	1,962	1,242	5,507	...	...	...	...	...	...	...	...	21	21	21	21	733	3,149	22
46	131	681	1,881	...	...	...	...	...	...	...	...	...	...	...	...	4,292	9,982	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
281	1,024	480	1,814	...	...	...	...	...	...	...	...	...	...	...	...	665	1,990	30
42	38	42	38	...	...	...	...	...	...	...	...	78	27	78	27	276	176	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	165	211	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
5	13	10	26	...	...	...	...	...	...	...	...	...	...	...	...	167	212	33
87	206	87	206	...	...	...	...	112	801	...	...	...	...	112	801	11	85	34
...	5	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
1,632	24,400	1,663	25,901	...	...	...	...	...	...	...	...	...	...	...	...	1,040	17,469	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
394,019	31,64,305	651,674	62,83,149	3,342	20,846	15,051	62,026	65,156	3,67,039	19,948	89,200	633,744	15,42,687	737,241	20,81,796	1,609,292	99,37,343	
380,857	32,31,982	612,505	60,76,453	3,366	26,102	9,422	36,163	61,267	3,73,235	12,020	59,589	389,956	12,09,865	475,093	16,94,967	1,616,103	95,15,866	
13,162	...	39,169	2,06,696	...	...	5,629	25,863	...	...	7,928	30,611	264,788	3,41,822	262,305	3,86,837	...	21,477	
...	67,677	...	...	26	5,263	...	...	16,111	6,196	...	...	...	...	...	...	6,971	...	

In cases in which separate statistics have not been maintained.

Appendix 17.
Principal commodities carried.

APPEN
(Appendices 18 and 19
Principal commodities carried by railways and
(Referred to

Number.		Railway including branches* worked.	XXV. Saltpetre and other saline substances.						XXVI. Silk.									
			(1) Saltpetre.		(2) Other saline substances.		Total.		(1) Raw.				(2) Piece goods.				Total.	
									(a) Foreign.		(b) Indian.		(a) Foreign.		(b) Indian.			
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	2	14	90	378	92	392	...	...	...	...	...	...	...	...	...	...
2	(a) (b) & (d).	Bengal-Nagpur	...	...	...	...	...	...	...	...	410	6,543	...	...	...	...	410	6,543
3	(a), (c) to (f), (m) & (n).	Bombay, Baroda and Central India.	1,070	9,430	860	10,036	1,930	19,466	277	6,731	240	5,966	19	591	94	2,850	630	16,138
4	...	Eastern Bengal State	51	341	2,402	8,577	2,453	8,918	...	...	158	1,682	...	...	13	226	171	1,908
5	...	East Indian	24,851	2,68,850	18,201	1,36,668	43,052	4,05,518	...	...	845	10,875	3	47	154	5,752	1,002	16,674
6	...	Great Indian Peninsula	636	12,471	3,539	48,119	4,175	60,590	150	2,625	104	6,122	90	4,703	9	252	353	13,702
7	(a) to (c)	Madras	160	1,197	61	792	221	1,989	27	536	174	3,657	19	179	49	740	269	5,112
8	(a) & (b)	Nizam's Guaranteed State.	116	836	829	5,759	945	6,595	...	...	...	7	...	9	1	38	1	54
9	...	North-Western State	6,798	39,722	8,951	85,529	15,749	124,65	301	6,467	204	6,635	43	639	66	1,285	614	15,026
10	...	Oudh and Rohilkhand State.	980	4,128	158	816	1,138	4,944	...	...	6	47	...	...	8	106	14	153
		3′ 3¾″ gauge.																
11	...	Assam-Bengal	2	13	8	49	10	62	...	...	30	259	...	1	...	5	30	265
12	...	Bengal and North-Western.	13,950	52,944	4,513	20,535	18,463	73,479	...	...	...	87	...	...	3	60	14	147
13	...	Bengal-Dooars	...	...	101	269	101	269	...	...	...	...	...	...	...	...	...	...
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	37	176	12	70	49	246	9	26	...	...	...	...	...	2	9	28
15	...	Burma	1	20	18	301	19	321	46	1,280	2	52	8	149	6	29	62	1,510
16	...	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley.	40	500	178	1,464	218	2,624	5	102	...	1	...	8	5	138	10	249
18	...	Jodhpur-Bikaner	308	1,809	1,560	7,525	1,868	9,334	12	72	3	49	1	2	...	9	16	139
7	(d) & (e)	Madras	280	2,030	...	...	280	2,030	...	...	...	...	...	...	...	2	...	2
3	(b) & (g) to (l).	Rajputana-Malwa	8,850	53,093	2,620	22,246	11,520	75,939	219	11,851	22	414	19	1,172	67	3,944	327	17,381
19	(a) & (b)	Rohilkund and Kumaon	132	321	449	1,145	581	1,466	...	...	...	...	...	...	...	...	...	...
20	...	South Indian	342	2,960	12	72	354	2,152	...	...	23	352	...	...	2	19	25	371
21	...	Southern Mahratta	156	999	223	2,156	379	3,155	127	2,165	188	1,151	...	...	...	2	315	3,318
22	...	Udaipur-Chitor	26	157	56	306	82	462	...	1	...	...	...	...	...	...	...	1
		2′ 6″ gauge.																
24	...	Barsi Light	...	...	33	87	33	87	6	22	...	1	...	...	...	...	6	23
25	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	14	46	...	...	14	46	...	...	...	2	...	...	...	...	...	2
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Ranaghat-Krishnagar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	Kalka-Simla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2′ 0″ gauge.																
36	...	Darjeeling-Himalayan	...	...	1	20	1	20	1	32	...	...	...	...	...	...	1	32
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1903	58,902	4,51,237	44,925	3,52,917	1,03,727	8,04,154	1,180	31,917	2,420	43,992	202	7,5[illegible]	477	15,459	4,279	98,778
		Total 1902	57,095	4,63,716	40,141	3,13,677	97,236	7,77,393	1,187	33,193	2,755	48,611	25[illegible]	10,280	403	12,349	4,595	1,04,433
		Increase	1,707	...	4,784	39,240	6,491	26,761	...	...	...	...	...	...	74	3,110	...	...
		Decrease	...	12,479	...	...	...	...	7	1,276	335	4,709	48	2,780	...	...	316	5,655

* Includes particulars relating to branches worked on different gauges to the main line

DIX 17—*continued.*

in report for 1902.)

the earnings therefrom during the calendar year 1903.

in paragraph 21 of the Report.)

Appendix 17.

Principal commodities carried.

XXVII.												XXVIII.		Number.
Spices.														
(1) Betel-nuts.		(2) Cardamoms.		(3) Chillies.		(4) Ginger.		(5) Pepper.		(6) Others.		Total.		Stone and lime.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
7,723	27,020	...	...	313	1,016	2	10	...	...	246	797	8,284	28,843	2,672	2,790	1
5,772	48,538	...	...	3,876	37,161	...	...	...	...	3,959	29,475	13,607	1,15,174	36,249	1,34,706	2
1,247	24,684	26	1,957	1,624	20,411	1,119	13,664	690	14,136	8,679	1,03,022	13,435	1,77,874	31,120	1,(0,059	3
10,789	92,662	254	5,449	5,146	34,764	1,631	26,647	441	9,032	2,633	17,477	20,894	1,85,031	26,660	42,763	4
11,664	2,67,378	493	12,233	7,098	95,547	983	8,328	916	23,671	9,978	1,65,939	31,132	5,73,596	293,454	11,29,969	5
8,774	1,79,902	87	3,898	7,297	65,824	604	16,802	506	20,063	9,701	1,37,860	26,969	4,24,289	103,416	2,28,141	6
11,655	1,22,847	21	410	18,843	1,31,551	1,141	8,754	2,550	22,526	3,653	21,220	37,853	3,07,308	82,603	1,24,010	7
1,113	10,698	3	43	2,069	16,823	99	736	33	360	1,309	10,124	4,626	38,784	9,959	35,126	8
657	6,779	278	5,049	6,083	53,782	1,390	19,348	726	21,695	3,100	35,938	12,234	1,47,591	305,251	3,69,268	9
1,975	33,588	64	735	1,576	15,187	439	3,808	119	1,020	1,798	9,094	5,941	63,432	143,128	1,48,832	10
1,277	8,897	...	...	530	2,683	...	2	9	57	76	522	1,892	12,161	3,790	8,781	11
2,881	24,018	196	2,000	4,940	38,121	1,271	11,824	464	4,639	2,667	20,190	12,419	1,00,792	15,019	37,659	12
247	930	24	158	17	57	61	93	...	...	28	107	377	1,345	268	785	13
631	3,291	1	14	212	1,479	16	113	6	62	1,226	4,492	2,095	9,391	55,744	86,883	14
5,307	54,523	3	46	6,612	1,13,383	659	7,180	19	447	120	1,275	12,920	1,76,853	78,759	1,08,719	15
28	8	1	1	10	3	...	...	5	2	...	...	44	14	...	...	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	6,507	7,55	17
497	5,631	2	25	1,152	13,434	26	281	20	250	296	2,645	1,933	22,266	530	93	8
101	679	6	37	632	6,701	41	369	24	150	659	3,557	1,516	10,993	21, 4	20,283	18
1,158	2,936	3	9	2,832	11,034	20	80	80	291	26	62	4,117	14,412	589	5	7
902	16,167	83	3,678	2,568	25,529	622	16,997	457	15,575	11,875	1,10,534	16,597	1,88,480	24,836	96,441	3
171	1,530	22	97	330	1,673	80	460	21	123	459	1,598	1,093	5,531	23,088	29,675	19
15,108	81,263	466	4,424	9,671	1,01,403	423	3,499	706	7,164	481	3,172	26,849	2,00,925	81,553	1,16,145	20
12,330	1,00,144	176	2,410	17,893	1,15,096	318	2,944	498	4,129	6,156	48,821	37,371	2,73,544	26,894	56,391	21
5	38	1	5	4	25	20	174	2	19	73	321	105	582	178	714	22
387	1,037	...	1	43	116	8	22	7	20	129	329	574	1,525	91	253	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
16	56	...	1	31	152	2	7	...	1	101	542	150	759	223	402	30
2	2	13	12	...	...	...	...	...	...	17	12	32	26	13	7	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	49	53	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	59	159	34
...	...	...	...	...	...	...	...	...	...	...	4	...	4	24	253	28
41	992	137	2,222	10	188	...	8	17	402	31	627	236	4,429	1,289	12,886	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
102,564	11,16,667	2,410	44,914	101,162	9,07,643	10,985	142,150	8,290	1,44,894	69,384	729,696	295,295	29,85,954	1,389,618	28,62,853	
89,327	9,75,900	2,917	42,595	105,348	10,10,604	7,444	97,978	6,568	1,31,315	61,059	679,649	273,263	29,27,941	1,236,606	25,38,925	
13,237	1,40,867	...	2,319	...	...	3,541	54,172	1,722	13,569	7,725	50,047	22,032	1,58,013	153,012	3,23,928	
...	...	507	...	4,186	1,02,961	...	...	...	...	...	...	...	...	...	...	

in cases in which separate statistics have not been maintained.

Appendix 17.
Principal commodities carried.

APPEN

(Appendices 18 and 19

Principal commodities carried by railways and

(Referred to in para

Number.		Railway including branches* worked.	XXIX. Sugar. (1) Refined or crystalized including sugar-candy.		(2) Unrefined. (a) Sugar.		(b) *Gur, rab*, jaggery, molasses and other saccharine produce.		Total.		XXX. Tea. (1) Foreign.		(2) Indian.		Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	663	2,513	2,005	4,530	1,011	2,600	3,670	9,643	...	...	4	6	4	6
2	(a) (b) & (d)	Bengal-Nagpur	13,345	95,443	...	...	15,732	1,33,095	29,077	2,28,538	...	...	759	10,373	759	10,373
3	(a) (c) to (f) (m) & (n)	Bombay, Baroda and Central India	30,119	3,93,086	184	1,234	28,743	2,66,605	59,046	6,60,915	474	5,797	247	3,794	721	9,591
4	...	Eastern Bengal State	14,046	95,532	12,103	51,891	23,451	1,23,613	49,600	2,71,236	...	...	36,221	7,40,672	36,221	7,40,672
5	...	East Indian	22,956	2,42,705	50,532	3,00,378	110,319	5,57,736	183,807	11,00,819	...	...	1,901	30,172	1,901	30,172
6	...	Great Indian Peninsula	58,601	9,80,826	9,846	89,325	95,828	8,25,449	164,275	18,95,600	100	1,559	1,869	43,361	1,969	44,920
7	(a) to (c)	Madras	12,184	48,751	9,328	27,304	56,436	2,01,274	77,948	2,77,329	26	666	431	8,360	457	9,026
8	(a) & (b)	Nizam's Guaranteed State	1,925	14,676	1,384	12,409	6,213	47,680	9,522	74,765	16	219	55	968	71	1,187
9	...	North-Western State	60,303	11,77,054	16,198	1,15,740	134,073	9,50,657	210,574	22,43,451	685	18,432	2,459	35,643	3,144	54,075
10	...	Oudh and Rohilkhand State	10,097	49,091	66,994	2,97,979	79,324	2,83,248	156,415	6,30,318	...	...	2,087	12,542	2,087	12,542
		3′ 3¾″ gauge.														
11	...	Assam-Bengal	220	824	1,028	4,461	2,690	11,520	3,938	16,805	...	...	19,408	1,64,048	19,408	1,64,048
12	...	Bengal and North-Western	12,779	80,683	21,266	1,37,816	62,946	314,862	96,991	5,33,361	...	...	77	938	77	938
13	...	Bengal-Dooars	597	1,988	60	247	962	3,767	1,619	6,002	34,116	2,44,122	...	...	34,116	2,44,122
1	...	Bhavnagar-Gondal-Junagad-Porbandar.	6,478	29,438	...	...	4,808	18,321	11,286	47,759	4	40	29	233	33	273
15	...	Burma	65	479	3,946	43,208	15,126	1,32,081	19,137	1,75,768	1,165	19,615	65	874	1,230	20,489
16	...	Deoghur	...	...	100	28	155	44	255	72	...	...	...	...	...	...
17	...	Dibru-Sadiya	...	...	304	2,330	...	...	304	2,330	...	...	7,736	61,832	7,736	61,832
8	(c)	Hyderabad-Godavari Valley	1,808	15,606	298	2,252	3,604	24,590	5,710	42,448	7	100	1	21	8	121
18	...	Jodhpur-Bikaner	2,848	19,668	3,946	19,853	9,149	59,357	15,843	98,878	11	205	13	213	24	418
7	(d) & (e)	Madras	700	3,140	40	343	2,224	5,169	2,964	8,652	4	14	167	939	171	953
2	(b) & (g) to (l)	Rajputana-Malwa	21,020	2,30,485	47,108	3,84,345	83,543	9,97,919	151,671	16,02,749	472	11,645	158	1,979	570	13,624
19	(a) & (b)	Rohilkund and Kumaon	1,084	3,897	5,871	14,602	14,440	54,803	21,395	73,307	...	...	249	2,226	249	2,226
20	...	South Indian	21,190	73,016	7,525	23,136	50,774	3,00,503	79,429	3,96,655	1	17	2,572	16,064	2,573	16,081
21	...	Southern Mahratta	7,116	37,762	5,902	40,938	56,555	3,46,763	69,573	4,25,463	20	332	42	829	62	1,161
22	...	Udaipur-Chitor	157	786	837	4,169	838	4,274	1,832	9,229	...	1	1	6	1	7
		2′ 6″ gauge.														
24	...	Barsi Light	362	867	12	30	269	654	643	1,551	1	2	...	...	1	...
25	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Morvi	213	629	38	317	953	2,559	1,204	3,505	2	10	3	16	5	26
2	(c)	Parlakimedi Light	56	33	...	...	...	...	56	33	...	...	...	...	...	...
19	(c)	Powayan Light	...	...	884	961	...	...	884	961	...	...	...	...	...	...
31	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	48	83	111	137	159	220	...	...	...	...	...	...
34	...	Tezpur Balipara	5	24	...	...	...	...	5	24	...	...	3,679	26,103	30,679	26,103
28	...	Kalka-Simla	...	...	...	...	23	339	23	339	...	...	...	...	...	...
		2′ 0″ gauge.														
36	...	Darjeeling-Himalayan.	61	1,120	643	11,357	297	4,593	1,001	17,070	...	...	4,095	57,152	4,095	57,152
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1903	300,938	36,00,122	268,330	15,91,256	860,597	56,64,417	1,429,865	1,08,55,795	37,044	3,02,776	84,328	12,19,364	1,21,372	15,22,140
		Total 1902	310,204	36,66,349	242,365	15,58,154	826,302	55,02,288	1,378,871	1,07,26,791	2,268	46,931	103,105	13,32,060	1,05,373	13,78,991
		Increase	...	...	25,965	33,102	34,295	1,62,129	50,994	1,29,004	34,776	2,55,845	...	...	15,999	1,43,149
		Decrease	9,266	66,227	...	...	...	...	...	...	...	...	18,777	1,12,696	...	...

* Includes particulars relating to branches worked on different gauges to the

DIX 17—*continued.*

Appendix 17.
Principal commodities carried.

in Report for 1902.)

the earnings therefrom during the calendar year 1903.

graph 21 of the Report.)

XXXI. Tobacco. (1) Unmanufactured. Quantity.	Earnings.	(2) Manufactured. (a) Cigars. Quantity.	Earnings.	(b) Other sorts. Quantity.	Earnings.	Total. Quantity.	Earnings.	XXXII. Wood. (1) Timber, unwrought. Quantity.	Earnings.	(2) Manufactures. Quantity.	Earnings.	Total. Quantity.	Earnings.	XXXIII—(contd. on following page). Wool. (1) Raw. Quantity.	Earnings.	(2) Manufactured. (a) Carpets and rugs. Quantity.	Earnings.	(b) Piece-goods, European. Quantity.	Earnings.	(c) Piece-goods, Indian. Quantity.	Earnings.	Number. Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
2,251	8,123	...	...	8	61	2,259	8,184	1,941	3,965	478	2,151	2,319	6,116	...	...	...	...	...	...	...	...	1
6,146	57,632	...	...	373	7,106	6,519	64,738	34,150	1,49,361	1,595	12,772	35,745	1,62,133	...	...	...	...	...	...	...	...	2
13,371	1,16,578	373	4,682	337	8,976	14,081	1,25,236	23,881	1,48,407	2,279	23,886	26,160	1,72,293	5,656	1,15,545	250	4,760	104	2,307	351	7,861	3
28,977	2,79,002	...	...	514	8,035	29,491	2,87,037	10,096	47,426	3,112	24,266	13,208	71,692	1,600	31,260	...	...	...	...	...	...	4
27,346	2,74,282	24	3,397	2,375	63,937	29,815	3,41,617	57,113	1,89,870	7,248	73,269	64,361	2,63,139	1,043	21,336	648	21,725	625	7,315	397	7,932	5
7,788	84,583	933	30,156	335	6,747	9,056	1,21,486	162,538	5,30,917	5,103	71,573	167,641	6,03,490	764	15,941	36	3,043	162	2,079	325	10,744	6
25,841	1,47,843	729	15,389	1,130	17,190	27,700	1,80,422	177,814	5,64,038	4,747	29,155	182,561	5,93,223	1,043	6,428	538	5,413	219	5,486	380	4,049	7
2,245	29,894	96	1,524	28	416	2,369	30,864	15,035	58,300	609	5,957	15,644	64,257	99	997	97	1,410	18	187	226	2,295	8
16,191	1,59,631	164	4,942	1,590	44,112	17,945	2,08,685	99,531	3,14,749	8,782	85,099	108,313	3,99,848	15,933	4,63,566	213	4,463	1,003	16,998	1,206	26,177	9
7,149	30,527	62	734	197	1,273	7,408	32,534	90,758	1,89,319	2,523	13,688	93,281	2,03,007	260	1,759	5	20	55	573	218	2,274	10
645	4,607	2	27	184	1,374	831	6,008	833	1,990	1,050	8,048	1,883	10,038	...	2	10	116	3	12	4	72	11
26,048	1,96,778	117	955	381	2,731	26,546	2,00,464	13,722	31,336	16,248	57,184	30,020	88,520	125	1,518	937	1,105	14	151	130	1,636	12
1,649	4,051	11	62	...	...	1,859	4,113	948	2,336	839	4,422	1,787	6,758	...	...	...	...	...	...	...	...	13
1,133	4,502	5	53	176	1,352	1,314	5,907	8,777	43,043	731	5,295	9,508	48,338	487	3,164	...	...	1	7	17	28	14
3,620	32,054	144	1,727	821	9,199	4,591	42,980	117,279	4,89,416	2,667	22,800	119,946	5,12,216	21	159	73	1,522	27	482	9	165	15
100	80	50	14	...	...	150	44	35	9	...	...	35	9	...	...	...	...	...	...	...	...	16
...	...	...	...	...	...	...	...	3,473	14,437	...	...	3,473	14,437	...	...	...	...	...	...	...	...	17
212	3,203	7	127	24	479	243	3,809	6,533	28,248	574	4,652	7,107	32,900	7	90	34	614	4	44	59	867	8
1,325	9,221	37	481	74	807	1,436	10,509	1,154	5,837	243	1,738	1,397	7,015	2,906	21,704	7	26	9	64	81	862	18
1,864	6,783	31	299	115	284	2,010	7,366	6,419	14,948	217	1,817	6,636	16,765	15	3	16	161	10	72	11	110	7
10,964	1,27,131	224	6,290	570	6,019	11,758	1,39,440	12,989	61,575	5,570	23,115	16,559	84,690	6,320	1,03,431	184	7,272	117	4,162	580	16,076	3
1,949	9,353	21	276	172	1,864	2,142	11,193	28,622	92,070	1,168	6,168	29,790	98,238	193	1,551	2	14	2	10	26	209	19
7,191	37,982	1,402	18,395	3,956	10,288	13,549	66,665	90,519	1,49,930	5,122	38,835	95,641	1,88,695	1,871	1,632	46	365	7	23	139	2,612	20
12,060	66,203	284	5,946	223	3,923	12,567	76,073	31,078	1,46,062	5,028	30,200	30,106	1,76,262	202	3,168	...	5	...	23	28	415	21
308	1,394	...	...	6	41	314	1,435	22	119	9	78	31	197	64	475	...	...	...	...	1	8	22
25	70	2	5	11	61	38	136	148	319	39	125	182	444	...	...	...	...	...	...	...	...	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
524	1,677	2	12	32	201	558	1,890	432	1,040	67	392	499	2,032	109	944	2	15	1	8	6	44	30
1	1	...	...	...	...	1	1	17	12	32	22	49	34	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	778	1,230	...	...	778	1,230	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
12	19	...	...	...	...	12	19	...	...	31	15	31	45	...	...	...	...	...	...	...	...	33
4	27	...	...	...	...	4	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	4	...	...	...	4	...	...	...	...	...	5	...	...	28
58	1,165	106	2,522	94	1,761	258	5,448	101	1,628	147	3,076	248	4,704	1	29	8	222	6	151	8	226	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
207,262	16,92,747	4,896	97,955	13,726	1,92,968	225,824	19,83,670	996,681	32,82,001	74,258	5,49,828	10,70,939	38,31,829	38,205	7,96,796	3,156	62,331	2,376	45,161	4,236	84,507	
208,070	16,99,093	5,002	90,076	14,482	1,94,956	227,554	19,84,125	948,666	31,62,941	69,443	5,38,713	10,18,109	37,01,654	29,445	5,35,560	2,568	45,226	2,583	45,286	4,860	101276	
...	...	...	7,879	...	...	...	...	48,015	1,19,060	4,815	12,115	52,830	1,30,175	9,260	2,61,206	588	7,105	...	...	...	...	
868	6,346	106	...	756	1,988	1,730	455	...	...	...	...	...	...	...	...	...	...	207	125	624	16,769	

main line in cases in which separate statistics have not been maintained.

Appendix 17.

Principal commodities carried.

(Appendices 18 and 19

Principal commodities carried by railways and

(Referred to in paragraph

Number.		Railway including branches* worked.	XXXIII. Wool—*concluded.* (2) Manufactured—*concld.* (*d*) Other sorts of manufacture.		Total.		XXXIV. All other articles of merchandise.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.						
1	...	Bengal Central	...	...	...	...	7,156	25,236
2	(*a*), (*b*) & (*d*)	Bengal-Nagpur	...	...	...	...	82,544	4,18,423
3	(*a*), (*c*) to (*f*), (*m*) & (*n*).	Bombay, Baroda and Central India	60	1,340	6,421	1,31,813	234,248	12,68,806
4	...	Eastern Bengal State	146	1,825	1,746	33,085	110,632	5,79,677
5	...	East Indian	1,028	27,954	3,741	86,262	381,939	31,00,901
6	...	Great Indian Peninsula	1,098	20,421	2,439	57,228	††78,149	††7,49,572
7	(*a*) to (*c*)	Madras	595	5,009	2,769	28,385	103,878	6,84,376
8	(*a*) & (*b*)	Nizam's Guaranteed State	...	...	435	4,889	11,536	87,482
9	...	North Western State	708	14,944	19,063	5,26,148	330,736	23,02,992
10	...	Oudh and Rohilkhand State	...	...	568	4,622	176,229	7,60,268
		3′ 3½″ gauge.						
11	...	Assam-Bengal	...	7	17	211	9,417	63,935
12	...	Bengal and North-Western	85	627	1,301	5,037	69,664	2,82,665
13	...	Bengal-Dooars	...	...	...	...	11,687	44,316
14	...	Bhavnagar-Gondal-Junagad-Porbandar	1	6	506	3,255	7,494	46,356
15	...	Burma	...	...	130	2,328	156,824	5,72,376
16	...	Deoghur	...	...	...	...	9,835	2,862
17	...	Dibru-Sadiya	...	...	...	...	††32,819	††65,636
8	(*c*)	Hyderabad-Godavari Valley	...	...	104	1,415	3,291	38,662
18	...	Jodhpur-Bikaner	59	555	3,032	23,361	21,753	1,12,255
7	(*d*) & (*e*)	Madras	4	18	42	369	4,969	40,188
3	(*b*) & (*g*) to (*i*).	Rajputana-Malwa	119	2,604	7,320	1,33,545	180,416	9,40,768
19	(*a*) & (*b*)	Rohilkund and Kumaon	32	216	255	2,000	73,252	1,34,096
20	...	South Indian	155	1,346	2,218	5,978	113,599	5,97,381
21	...	Southern Mahratta	896	10,833	1,120	14,444	84,371	3,34,229
22	...	Udaipur-Chitor	1	17	66	498	769	5,580
		2′ 6″ gauge.						
24	...	Barsi Light	6	16	6	16	491	1,540
25	...	Bakhtiarpore-Behar Light	...	...	...	...	6,743	9,438
30	...	Morvi	1	7	139	1,018	960	5,132
2	(*c*)	Parlakimedi Light	...	...	...	...	347	282
10	(*c*)	Powayan Light	...	...	...	...	15,088	19,340
31	...	Ranaghat-Krishnagar Light	...	...	...	...	6,705	9,157
33	...	Tarakeshwar-Magra	...	...	...	...	6,900	3,275
34	...	Tezpur-Balipara	...	...	...	...	1,173	8,544
28	...	Kalka-Simla	...	...	...	5	17	405
		2′ 0″ gauge.						
36	...	Darjeeling-Himalayan	3	102	26	730	4,442	52,877
37	...	Howrah-Amta	...	...	...	...	16,912	24,958
38	...	Howrah-Sheakhala	...	...	...	...	7,253	9,303
39	...	Jorhat	...	...	...	...	12,071	63,218
		Total 1903	4,991	87,947	53,464	10,66,642	2,526,298	1,49,63,650
		Total 1902	4,281	65,365	43,737	7,92,743	2,760,462	1,52,49,456
		Increase	710	22,482	9,727	2,73,899	...	...
		Decrease	...	...	...	...	234,164	2,85,806

* Includes particulars relating to branches worked on different gauges to the

† Including 26,677 tons and Rs. 82,703 of the Gwalior Light railway

‡ Excluding Rs. 5,58,946 in respect of ferries and

**Total shown against "All other articles of merchandise."

†† Including 19,920 tons and Rs. 11,846 of general merchandise of the Ledo and Tikak-Margherita colliery railway of which details by commodities have not been furnished.

DIX 17—*concluded.*

in Report for 1902.)

the earnings therefrom during the calendar year 1903.

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GRAND TOTAL.		ANIMALS. (1) Horses.		(2) Cattle.		(3) Sheep, etc.		(4) Elephants.		Total.		Number. Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
189,105	5,90,425	...	...	2	23	...	2	...	...	2	25	1
2,201,781	78,13,754	39	2,076	5,743	25,127	3,193	32,728	...	...	8,974	59,931	2
1,449,612	1,08,48,673	265	10,367	6,839	1,50,766	12,193	2,41,682	...	...	19,297	4,02,815	3
1,984,544	98,19,095	4	39	140	1,639	133	1,029	...	...	277	2,757	4
9,393,648	4,61,46,254	1,779	1,11,592	2,692	77,344	2,852	70,754	1	1,154	7,324	2,60,844	5
3,284,953	3,97,97,243	1,168	93,858	6,112	68,090	9,191	1,43,731	...	...	16,466	3,05,619	6
1,929,624	93,56,057	...	...	...	...	...	...	...	...	...	...	7
682,330	34,05,646	272	7,819	62	1,625	30	476	...	...	364	9,920	8
3,480,960	3,19,97,090	14,948	1,21,954	6,139	75,476	19,417	9,130	...	...	40,504	2,06,560	9
1,472,235	59,48,971	567	10,975	526	5,484	17	2,554	...	...	1,110	19,013	10
2,16,057	8,31,206	21	517	40	739	126	1,649	...	...	187	2,905	11
1,337,443	159,63,670	39	1,135	321	4,247	78	1,746	...	...	338	7,128	12
107,803	4,37,037	...	...	...	...	...	...	...	...	...	...	13
247,774	8,38,661	53	544	38	737	9	67	1	252	101	1,600	14
1,133,174	58,79,253	628	31,770	9,221	2,85,164	1,647	39,155	...	...	11,694	3,56,089	15
15,960	4,349	...	...	...	...	...	...	...	...	...	...	16
549,572	7,94,052	47	309	...	...	...	...	...	...	47	309	17
153,534	12,61,142	56	1,322	7	164	52	1,099	...	...	115	2,585	8
326,571	14,91,948	80	1,975	7	101	5	55	...	...	92	2,131	18
76,296	2,53,304	...	...	...	...	...	...	...	...	...	...	7
1,670,892	1,45,63,552	418	15,909	1,374	20,357	4,129	50,511	...	...	5,921	86,777	3
362,151	9,45,167	28	1,090	31	417	...	...	...	...	59	1,507	19
1,313,369	52,58,416	21	454	796	5,265	3,353	15,736	...	...	4,170	21,455	20
933,735	54,24,444	283	9,629	242	5,686	632	5,048	1	147	1,158	20,510	21
13,803	64,105	4	50	5	45	...	...	...	...	9	95	22
44,585	1,04,901	...	...	...	...	...	...	...	...	...	...	24
**6,743	**9,438	...	...	...	...	...	...	...	...	...	...	25
18,643	68,273	22	319	7	88	...	...	...	...	29	402	30
3,824	3,005	...	...	...	...	...	...	...	...	...	...	2
20,319	27,089	...	...	...	...	...	...	...	...	...	...	19
**6,705	**9,157	...	...	...	...	...	...	...	...	...	...	31
14,627	11,117	...	...	...	...	...	...	...	...	...	...	33
9,302	49,748	...	...	...	...	...	...	...	...	...	...	34
129	2,014	...	...	...	...	...	...	...	...	...	...	39
37,757	5,30,108	...	...	5	134	...	...	...	...	5	134	36
**16,912	**24,958	...	...	...	...	...	...	...	...	...	...	37
**7,253	**9,303	...	...	...	...	...	...	...	...	...	...	38
**12,071	**63,218	...	...	...	...	...	...	...	...	...	...	39
34,875,496	121,06,45,743	20,935	4,23,703	40,248	*7,28,703	57,057	6,17,152	3	1,553	(‖) 120,228	(‖)18,08,535	
33,120,881	19,89,13,944	24,915	4,19,100	33,686	4,17,744	126,397	6,03,281	6	519	(§) 187,207	(§) 15,17,462	
1,754,615	1,17,31,799	...	5,603	6,562	3,10,959	...	13,921	...	1,034	...	2,91,073	
...	...	3,980	...	...	...	69,340	...	3	...	66,979	...	

main line in cases in which separate statistics have not been maintained.
of which details by commodities have not been furnished.
steam boats, which are included in the details.
as details by commodities have not been furnished.

(§) Including 2,203 tons and Rs. 77,863 of live stock on the Madras railway not included in the details.
(‖) Including 1,985 tons and Rs. 37,424 of live stock on the Madras railway not included in the details.

Appendix 18.
Analysis.

APPEN
(Appendix 46 in

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number	1(a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (l)
		Calendar year 1903.	Bengal Central.	Bengal Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana Malwa.
	DESCRIPTION OF RAILWAY WORKED.												
1	Gauge of railway	...	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	3′ 3⅜″
2	Mileage worked . . . *Miles*	...	188·89	1667·01	825·12	277·93	2231·64	2745·46	1399·51	354·70	3743·57	1106·07	1871·43
3	Number of stations . . No.	...	27	226	127	82	366	374	287	45	516	169	272
4	Total length of the following gradients :—												
	(a) $\frac{1}{30}$ and less . . *Miles*	...	...	...	...	...	5·90	*19·31	...	...	71·19	...	3·40
	(b) $\frac{1}{31}$ to $\frac{1}{80}$ . . . ,,	...	...	0·15	1·32	...	16·78	*2·82	22·84	...	84·97	9·30	0·23
	(c) $\frac{1}{81}$ to $\frac{1}{100}$ . . . ,,	...	...	36·67	0·50	...	40·27	*61·90	49·60	79·19	134·21	6·41	18·75
	(d) $\frac{1}{101}$ to $\frac{1}{200}$ . . ,,	...	...	553·10	168·04	...	150·25	*549·90	289·63	110·99	110·83	19·15	309·57
	(e) $\frac{1}{201}$ to $\frac{1}{300}$ . . ,,	...	...	140·20	47·97	2·45	131·88	*210·95	156·57	18·22	116·94	22·56	155·83
5	Steepest gradient worked—												
	(a) Inclination . .	...	$\frac{1}{300}$	$\frac{1}{87}$	$\frac{1}{80}$	$\frac{1}{300}$	$\frac{1}{80}$	*$\frac{1}{87}$	$\frac{1}{80}$	$\frac{1}{100}$	$\frac{1}{87}$	$\frac{1}{175}$	$\frac{1}{70}$
	(b) Length . . . *Miles*	...	...	0·57	1·32	2·00	13·34	*5·99	0·80	2·52	5·60	2·25	3·40
	FINANCIAL RESULTS.	Calendar year 1903 by half-years.											
6	Percentage of net earnings (including steam boat traffic) for each half-year on capital outlay . *Per cent.*	1st half	1·36	1·77	3·82	1·57	4·97	*5·16	2·14	§3·44	2·19	3·39	4·69
		2nd ,,	2·49	1·25	3·17	4·80	4·48	*2·52	1·48	§2·48	2·60	1·36	2·92
7	Percentage of net earnings for each half-year on paid up capital . . . *Per cent.*	1st half	1·39	1·71	3·39	...	...	†2·49	2·18	§2·90	...	...	...
		2nd ,,	2·34	1·26	1·99	...	...	†1·55	1·51	§2·12	...	...	...
	OUTLAY EARNINGS AND EXPENSES. *(Exclusive of Steam-boat Service.)*												
	Capital outlay per mile open . Rs.	1st half	1,02,595	1,31,573	1,96,293	2,71,417	2,23,864	‡1,94,100	1,36,661	§1,27,449	1,44,116	1,15,885	76,314
		2nd ,,	1,02,816	1,34,031	1,87,617	2,84,472	2,25,568	‡1,94,312	1,38,269	§1,28,554	1,44,268	1,19,994	75,732
9	Total earnings per mile open per week . . . . ,,	1st half	172	192	536	536	648	476	249	288	263	265	257
		2nd ,,	246	164	382	878	601	318	227	213	278	203	200
10	Total working expenses per mile open per week . . . ,,	1st half	122	96	238	369	214	206	130	119	137	110	115
		2nd ,,	155	95	213	342	207	185	145	91	129	115	112
11	Total earnings per train-mile . ,,	1st half	3·12	3·63	7·09	4·08	4·45	4·07	3·89	4·35	3·62	3·60	4·18
		2nd ,,	3·33	3·12	5·76	5·26	4·47	3·41	3·59	4·41	3·50	2·83	3·66
12	Total working expenses per train-mile . . . . ,,	1st half	2·22	1·82	3·15	2·81	1·47	1·76	2·03	2·00	1·89	1·50	1·87
		2nd ,,	2·10	1·81	3·21	2·05	1·54	1·98	2·30	1·97	1·62	1·60	2·05
13	Net earnings per train-mile . ,,	1st half	0·90	1·81	3·94	1·27	2·98	2·31	1·86	2·85	1·73	2·10	2·31
		2nd ,,	1·23	1·31	2·55	3·21	2·93	1·43	1·29	2·54	1·88	1·23	1·61
14	Cost per 1,000 gross ton miles moved (freight and dead-weight) . . . . . ,,	1st half	10·27	4·99	7·31	8·20	3·32	5·01	6·03	4·88	5·50	3·84	7·41
		2nd ,,	7·23	5·33	8·77	4·94	3·70	6·06	7·45	4·55	4·61	4·87	8·98
15	Percentage of total working expenses on total earnings *Per cent.*	1st half	71·04	50·18	44·39	68·84	33·01	43·27	52·20	41·28	52·06	41·65	44·68
		2nd ,,	63·09	57·99	55·80	38·95	34·47	58·10	63·96	42·48	46·43	56·58	56·11
16	Percentage of total working expenses on total earnings, excluding from both sides of the account of the charges for carriage of revenue stores. . . *Per cent.*	1st half	70·85	48·56	43·87	70·16	31·48	41·89	51·22	40·67	50·20	39·40	43·74
		2nd ,,	62·92	56·32	55·52	38·70	32·98	56·64	63·11	41·42	44·52	54·64	55·30
	(Inclusive of Steam-boat Service.)												
17	Percentage of total working expenses on total earnings (for details, see items 123–29) *Per cent.*	1st half	71·04	50·99	44·39	68·84	33·20	43·27	52·20	41·28	52·09	41·65	44·68
		2nd ,,	63·09	58·83	55·80	38·95	34·62	58·10	63·96	42·48	46·46	56·58	56·11

* Great Indian Peninsula railway only. The figures for the
† Indian Midland railway only.
‡ Great Indian Peninsula railway only. The figures for the
§ Nizam's guaranteed State railway only.
¶ Calculated on the mileage, excluding the dock estates and

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Report for 1902.)

(by systems) during each half-year of 1903.

prepared by the railways not shown.

3′ 3⅜″												2′ 6″			Gauge.	
4 (*b*) to (*d*)	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) & (*b*)	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hyderabad Godavari Valley.	Assam Bengal.	Noakhali (Bengal).	Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta	Udaipur-Chitor.	Jubbulpore Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903.	
3′ 3⅜″	3′ 3⅜″	3′ 5⅛″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	2′ 6″	2′ 6″	2′ 6″	...	1
732·14	391·42	635·38	19·24	1417·96	455·45	1323·19	824·27	280·09	1248·81	1646·20	68·72	54·39	56·24	116·56	...	2
120	46	92	6	251	64	213	84	47	220	230	7	8	8	19	...	3
0·37	...	..	...	...	1·83	64·52	...	...	...	15·40	...	...	...	0·90	...	4
0·64	...	2·07	...	...	0·28	31·88	...	6·41	...	48·92	...	5·04	...	...	...	
2·05	...	6·95	...	0·17	1·68	47·78	...	8·56	125·19	537·07	1·10	12·30	...	43·62	...	
20·81	221·73	82·22	7·45	2·38	123·76	155·52	165·92	4·40	227·85	250 35	30·75	14·24	18·60	35 94	...	
14·65	13·95	28·55	0·67	2·15	64·74	107·78	59·59	6·83	100·41	95·69	6·98	2·57	1·95	20·49	...	
1/282	1/133	1/91	1/300	1/100	1/30	1/25	1/150	1/70	1/100	1/40	1/100	1/30	1/125	1/33	...	
0·87	5·41	1·38	0·58	6·70	1·83	9 81	2·31	3·00	4·22	15·40	0·46	5·04	2·41	9·43	...	5
															Calendar year 1903 by half-years	
1·93	2·69	0·18	...	3·72	2 66	2·54	4·45	4·32	4 54	1·51	1·98	0·55	1 33	—0·35	1st half	6
3·75	0·70	0·89	0 14	2·65	1 63	1 49	2·28	2·73	4·00	1·05	1·25	0·11	0 49	—0·91	2nd „	
...	2·62	...	...	...	...	2·54	...	...	...	...	...	0 55	1·33	..	1st half	7
...	0·68	...	...	...	...	1·49	...	...	...	...	...	0·05	0 49	...	2nd „	
93,368	66,008	1 26,206	...	78,923	¶49,873	93,320	25,227	46,050	62,869	85,558	30,761	39,025	24,773	58 412	1st half	8
94,788	66,254	1,25,324	66,377	79,517	¶49,998	94,002	25,456	46,344	69,263	85,687	30,701	53,995	24,823	59,359	2nd „	
176	131	66	122	172	96	219	73	135	200	119	56	67	29	39	1st half	9
283	87	78	31	142	68	176	55	113	197	104	45	12	22	42	2nd „	
102	61	57	135	68	45	119	30	58	75	69	33	19	17	47	1st half	10
97	69	58	27	63	37	119	33	59	94	69	31	9	18	61	2nd „	
2·93	3·01	2·42	2·06	2·89	4·03	3·41	3 27	3·14	3·43	2·80	3·82	21·38	1·57	10·01	1st half	11
3·51	2·23	3·28	2;10	2·69	3·49	2 87	2·46	2 64	3·82	2·55	3·04	3 40	1·07	0·92	2nd „	
1·70	1·42	2·10	2·27	1·07	1·89	1·85	1·32	1·34	1·29	1·62	2 23	5·98	0·89	1·24	1st half	12
1·46	1 81	2 47	1·86	1·18	1 89	1 94	1 45	1·37	1 42	1·69	2 07	2 72	0·85	1·36	2nd „	
1·23	1 59	0·32	—0·25	1·82	2·14	1·56	1·95	1 80	2·14	1·18	1 59	15·40	0·66	—0·23	1st half	13
2·05	0·47	0 81	0·24	1·51	1 60	0 93	1·01	1·27	1 90	0 86	0 97	0·68	0·22	—0·44	2nd „	
8·74	6·97	11·23	16·03	4·71	9·77	8 93	6·02	6 89	6·67	8·38	11·80	13·98	12 61	20 80	1st half	14
7·29	9 64	12 36	12 57	4·92	10·83	9 38	7·76	7 98	7 25	9·00	12·13	27 72	15·50	23·74	2nd „	
58·00	47·02	86·64	110 36	37 39	46·88	54·36	40·30	42·58	37·71	57 76	58·33	27·99	56 68	122 97	1st half	15
41·68	79 41	75 18	88·39	43·93	54·06	67·73	58·92	52·01	42·69	66·20	67·98	79·95	79·09	147·37	2nd „	
53·63	46 72	86·42	110·36	36·03	46 57	53 52	38·93	41·95	36·94	56·37	58·31	27·99	54·59	123·32	1st half	16
39·78	78 09	74·68	88 39	42·67	53·58	66 85	56 75	51·30	41·76	64·78	67·97	78 49	75 91	149 13	2nd „	
52·17	47·02	86·72	110·36	37·25	46·88	56·19	40·30	42·15	37·71	57·76	...	27·99	56·68	127·46	1st half	17
44·33	79·41	75·41	88·39	44·13	54·06	68·35	58 92	51·52	42·69	66·20	...	79·95	79·09	151·46	2nd „	

Indian Midland railway for 1st and 2nd halves were 2·54 and 1·25 respectivaly.

Indian Midland railway for 1st and 2nd halves were 1,34,538 and 1,36,512, respectively.

quarry lines constructed and maintained by the Native States as separate undertakings.

Appendix 18.
Analysis.

APPEN
(Appendix 46 in

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5'6"										
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (l)
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North-Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.												
18	Total working expenses for both coaching and goods traffic* in thousands of Rs. . R	1st half	3,35	39,39	46,26	23,83	1,18,85	1,43,83	43,53	10,34	1,23,75	27,59	54,69
		2nd ,,	5,47	38,34	43,29	21,69	1,14,78	1,23,60	51,19	7,50	1,22,80	31,32	54,22
	Proportions, *dividing expenditure in ratio† of gross ton-mileage (freight and dead load)*—												
19	Coaching in thousands of Rs. . ,,	1st half	2,32	12,73	16,41	10,99	32,56	37,45	15,02	2,11	39,61	10,91	17,23
		2nd ,,	2,03	13,17	20,10	6,80	31,77	46,54	18,92	1,95	36,76	15,07	21,18
20	Goods in thousands of Rs. . ,,	1st half	1,03	26,67	29,85	12,84	86,29	1,06,38	28,51	8,22	89,13	16,68	37,47
		2nd ,,	3,45	25,18	23,19	14,89	83,01	83,06	32,27	5,55	86,44	16,25	33,04
	COACHING TRAFFIC.												
	Gross receipts and train mileage (in thousands)—												
21	Receipts from coaching traffic R	1st half	3,90	29,07	30,91	18,06	1,17,89	74,12	35,70	5,14	88,12	32,32	39,72
		2nd ,,	4,09	28,79	29,57	17,32	1,11,40	70,96	33,57	4,22	85,04	28,99	37,47
22	Coaching train-miles run . No.	1st half	146	975	874	563	3,411	3,330	1,003	137	3,086	1,194	1,181
		2nd ,,	136	973	909	586	3,319	3,354	1,039	144	3,597	1,857	1,361
23	Average coaching receipts per train-mile . . . . R	1st half	2·68	2·98	3·54	3·21	3·46	2·23	3·56	3·75	2·86	2·71	3·36
		2nd ,,	2·95	2·96	3·25	2·95	3·36	2·12	3·23	2·94	2·36	2·14	2·75
	UNITS AND UNIT-MILEAGE.												
	Number of units carried one mile (in thousands)—												
24	1st class . . . *Unit miles*	1st half	48	1,275	1,818	990	6,074	7,434	2,449	366	4,479	1,826	1,608
		2nd ,,	58	1,162	1,553	812	4,476	6,685	1,963	254	3,809	1,525	988
25	2nd ,, . . . ,,	1st half	286	2,758	11,527	2,328	15,780	31,275	7,764	2,128	11,825	5,575	4,251
		2nd ,,	299	3,047	9,808	1,979	12,547	26,217	8,778	1,754	11,179	4,804	3,843
26	3rd or intermediate class ,,	1st half	1,168	5,711	20,661	11,876	51,858	‡43,542	1,561	‡4,929	41,303	17,403	12,354
		2nd ,,	1,477	5,666	20,581	12,206	50,797	‡43,984	1,314	‡4,513	40,100	18,496	11,643
27	4th or lowest ,, ,,	1st half	20,797	198,858	168,912	99,105	648,849	‖357,296	230,679	‖28,569	548,770	179,801	285,751
		2nd ,,	20,675	194,312	159,094	86,902	627,334	‖357,652	222,257	‖24,168	510,617	164,793	285,803
28	Total passenger unit-mileage ,,	1st half	22,299	208,603	202,919	114,300	722,511	489,547	242,454	35,991	606,347	204,615	303 965
		2nd ,,	22,509	204,187	191,037	101,899	695,154	434,537	234,312	30,689	565,704	189,618	302,277
29	Other coaching traffic . *Ton-miles*	1st half	137	1,070	2,729	762	11,759	9,091	2,390	455	5,818	1,815	3,043
		2nd ,,	147	975	2,736	1,141	10,121	7,728	2,100	285	8,274	1,542	2,586
	Average sum received for carrying a unit one mile—												
30	1st class . . . . *Pies*	1st half	14·41	15·13	10·26	14 41	14·71	11·12	12·16	14·76	11·01	11·76	14·15
		2nd ,,	14·08	14·63	10·41	13·53	15·14	11·39	12·73	14·31	11·32	11·86	13·84
31	2nd ,, ... ,,	1st half	7·32	6·37	4·64	6·22	5·69	3·99	5·15	4·25	4·62	5 10	6·22
		2nd ,,	7·16	6·49	5·03	6·44	6·84	4·37	4·87	4·51	4·78	5 35	6·24
32	3rd or intermediate class . ,,	1st half	3·49	3·31	2·99	2·95	3·24	‡2·99	4·50	‡2·50	3·02	3·03	2·99
		2nd ,,	3·37	3·27	2·99	2·96	3·28	‡3·00	4·48	‡2·50	3·02	2·98	2·99
33	4th or lowest ,, . ,,	1st half	3·00	2·30	2 24	2·49	2·44	‖2·16	2·26	‖1·98	2·27	2·48	2·01
		2nd ,,	3·00	2·31	2·30	2·49	2 44	‖2·14	2·22	‖1·98	2·27	2·41	2·01
34	Average for all classes . ,,	1st half	3·11	2·46	2·52	2·72	2·67	2·53	2·46	2·31	2·43	2·68	2 17
		2nd ,,	3·11	2·47	2·59	2·71	2·66	2·50	2·40	2·29	2·43	2 62	2·14
35	Other coaching traffic per ton mile	1st half	40·46	41·14	29·94	47·77	28·33	34·42	36·78	33 89	37·88	39·69	33·95
		2nd ,,	46·73	49·25	27·45	49·41	28·40	35·61	38·72	36·47	31·11	36 90	28·26

* Excluding steam-boat expenses, and after deducting telegraph
† For "freight" passenger units (items 24 to 27) have been
First class passenger with free luggage . . . .
Second ,, ,, ,, ...
Third or fourth class passenger with free luggage . .
plus the ton-mileage of
‡ Third class by
§ Including the
‖ Third class by

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***(by systems) during each half-year of 1903*—contd.**

prepared by the railways not shown.

3′ 3⅜″												2′ 6″			Gauge.	
4 (*b*) to (*d*).	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) and (*b*)	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hyderabad Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western.§	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Maratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
18,90	5,77	8,68	5	23,05	5,14	39,42	6,08	4,26	22,95	28,79	56	6	24	124	1st half	18
17,87	6,66	8,74	22	19,79	4,15	40,20	6,74	3,96	25,85	28,60	53	18	25	208	2nd „	
6,87	2,17	4,23	4	8,72	2,20	15,06	2,34	1,39	10,57	9,81	37	...	9	68	1st half	19
5,86	3,28	4,51	15	9,53	2,60	17,43	3,15	1,69	12,15	10,39	40	...	12	90	2nd „	
12,02	3,60	4,45	2	14,33	2,94	24,35	3,74	2,87	12,98	18,99	19	6	14	56	1st half	20
12,20	3,38	4,23	7	10,25	1,55	22,76	3,59	2,27	13,70	18,21	13	18	13	118	2nd „	
15,48	3,97	6,35	4	25,88	5,37	35,07	5,65	3,88	34,16	16,47	52	...	21	69	1st half	21
17,27	3,69	5,63	18	26,59	5,13	31,48	5,06	3,78	34,89	17,37	52	...	19	81	2nd „	
535	163	187	2	1,107	135	893	203	148	948	717	16	...	15	51	1st half	22
549	172	173	8	1,094	158	956	241	158	995	709	19	...	18	62	2nd „	
2·89	2·43	3·39	2·32	2·33	3·99	3·93	2·79	2·62	3·60	2·58	3·50	...	1·45	1·34	1st half	23
3·15	2·15	3·26	2·36	2·43	3·25	3·29	2·09	2·39	3·51	2·45	2·72	...	1·02	1·29	2nd „	
485	203	176	...	484	151	1,113	202	140	1,061	961	30	...	3	49	1st half	24
515	156	174	2	489	158	1,056	183	147	939	785	16	...	2	58	2nd „	
1,588	1,182	340	2	1,024	1,629	3,568	756	625	3,621	2,962	50	...	7	29	1st half	25
1,720	1,095	358	10	1,068	1,026	3,590	733	803	3,847	2,652	50	...	6	46	2nd „	
5,647	...	165	3	3,580	1,301	...	...	284	...	...	72	...	19	...	1st half	26
7,921	...	178	6	4,830	1,294	...	...	255	...	...	101	...	12	...	2nd „	
93,724	29,636	35,239	2,51	222,077	29,373	195,956	42,303	25,754	285,116	131,980	4,849	...	1,247	5,030	1st half	27
99,055	28,970	30,736	1,068	225,465	28,233	177,774	28,400	22,731	293,892	124,161	3,981	...	1,089	5,962	2nd „	
101,444	31,021	35,920	2,56	227,076	31,8·5	208,687	43,260	26,803	289,798	135,903	4,501	...	1,275	5,108	1st half	28
109,211	30,222	31,446	1,086	231,052	30,711	182,414	39,321	23,937	298,178	127,598	4,148	...	1,110	6,073	2nd „	
596	284	239	2	617	201	643	412	132	634	1,055	33	...	4	20	1st half	29
861	168	246	1	886	169	919	254	153	679	1,006	26	...	4	20	2nd „	
13·80	10·30	14·90	16·45	12·50	11·41	15·57	14·07	26·27	11·83	14·03	17·81	...	15·64	11·48	1st half	30
13·77	10·81	15·11	14·31	9·51	11·22	15·48	13·19	27·68	11·73	15·40	17·89	...	15·15	11·11	2nd „	
6·45	4·56	7·24	7·91	5·72	5·63	7·93	6·00	8·79	5·99	6·09	8·99	...	7·20	5·49	1st half	31
6·10	4·53	7·68	7·74	5·58	5·63	7·53	6·00	8·97	5·91	6·08	8·98	...	6·84	5·42	2nd „	
3·12	...	4·49	4·50	3·08	4·00	...	...	4·00	...	...	3·00	...	4·50	...	1st half	32
3·03	...	4·47	4·47	2·91	4·00	...	...	4·01	...	...	3·00	...	4·50	...	2nd „	
2·50	2·00	3·00	3·00	2·00	2·75	3·01	2·05	2·19	2·05	2·09	1·99	...	3·00	2·25	1st half	33
2·50	2·00	3·00	3·00	2·00	2·75	2·98	2·06	2·20	2·05	2·10	1·99	...	3·00	2·25	2nd „	
2·65	2·15	3·10	3·07	2·05	2·93	3·17	2·15	2·48	2·14	2·26	2·19	...	3·07	2·36	1st half	34
2·65	2·14	3·13	3·07	2·05	2·94	3·14	2·19	2·60	2·13	2·26	2·16	...	3·07	2·36	2nd „	
47·64	33·09	43·12	60·61	50·48	48·00	43·77	34·39	60·27	53·01	44·72	29·66	...	44·04	56·77	1st half	35
49·16	37·15	39·99	55·24	42·50	48·19	34·47	43·09	67·80	50·79	44·69	34·36	...	43·00	58·05	2nd „	

and sundry receipts, and leaving only the balance of payments, to other lines for mileage, etc.
converted into tons at the following rates, *viz.*:—
. . . 0·10 ton.
. . . 0·08 „
. . . 0·66 „
other coaching trains.
mail trains.
Cawnpore-Burhwal link.
other than mail trains.

Appendix 18.
Analysis.

APPEN
(Appendix 46 in

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number.	1 (*a*)	2 (*a*)	3 (*a*) to (*f*).	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*e*)	7 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*e*)	10 (*a*) & (*b*)	3 (*g*) to (*l*)
		Calendar year 1903 by half-years.	Bengal Central	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal	East Indian.	Great Indian Peninsula.	Madras	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	COACHING TRAFFIC—*contd.*												
	UNITS AND UNIT-MILEAGE—*concld.*												
	Average number of units in a train—												
36	1st class . . . . No.	1st half	0·33	1·31	2·08	1 76	1·78	2·23	2·44	2·67	1·44	1·54	1 36′
		2nd „	0·43	1·19	1·71	1·99	1·35	1·99	1·89	1·77	1·06	1·12	0·73
37	2nd „ . . . . . „	1st half	1·97	2·83	13·18	4·13	4·61	9 30	7·74	15·51	3·83	4 67	3·60
		2nd „	1·21	3·13	10·79	3·38	3·78	7·82	8·45	12·22	3·11	3·54	2·82
38	3rd or intermediate class „	1st half	8·02	5·86	23·63	21 10	15·20	13 08	1·56		13·39	14·58	10·46
		2nd „	10·89	5·82	22 64	20·82	15 30	13·11	1·26		11·15	13·64	8 56
39	4th or lowest „ „	1st half	142·85	204·02	193 20	176·06	190·24	107·29	230·09	244·26	177·83	150·60	241·90
		2nd „	152·49	199 61	175·02	148·24	188 99	106 64	213·92	199·82	141·97	121·48	209·99
40	Total passenger units „	1st half	153·17	214·02	232·09	208·05	211·83	131·99	241·83	262·44	196·49	171·39	257·32
		2nd „	166·02	209·75	210·16	173 83	209·42	129 56	225·52	213·81	157·29	139·78	222·10
41	Other coaching traffic *Tons*	1st half	0·94	1·10	3·12	1·35	3·45	2·73	2·38	3·32	1·89	1·52	2·58
		2nd „	1·09	1·00	3·01	1·95	3·05	2·31	2·02	1·98	2·30	1·14	1·90
	VEHICLES AND VEHICLE-MILEAGE—												
	Number of coaching vehicles (in thousands, hauled one mile—												
42	1st class . . *Vehicle-miles*	1st half	119	1,294	854	617	5,584	4,595	1,413	327	3,564	1,687	2,100
		2nd „	97	1,306	843	592	5,237	4,658	1,388	348	3,573	1,739	1,938
43	2nd „ . . „	1st half	151	1,226	1,738	614	4,889	5,555	1,589	362	3,457	1,384	1,959
		2nd „	143	1,268	1,814	566	4,722	5,664	1,597	375	3,689	1,542	1,918
44	3rd or intermediate class „	1st half	174	1,002	902	1,209	4,932	3,345	271		4,272	1,798	1,064
		2nd „	169	1,135	927	1,248	4,984	3,434	267		4,577	1,907	1,006
45	4th or lowest „ „	1st half	976	10,202	7,074	4,255	29,902	17,736	9,461	1,672	26,621	8,663	18,350
		2nd „	953	9,131	7,020	4,191	29,666	18,620	9,813	1,581	28,600	9,391	20,049
46	Other vehicles „	1st half	214	984	1,787	966	5,487	5,761	1,263	294	2,846	762	1,482
		2nd „	251	989	1,913	1,018	4,667	5,850	1,192	274	3,128	760	1,190
47	Brake-vans „	1st half	191	1,900	1,131	596	5,810	5,907	2,116	359	5,642	2,028	3,495
		2nd „	155	1,899	1,238	497	5,688	5,907	2,149	355	6,142	2,567	3,712
48	Total . „	1st half	1,825	16,607	13,526	8,195	56,554	42,899	16,112	3,014	46,403	16,322	28,451
		2nd „	1,769	15,728	13,756	8,112	55,014	44,163	16,406	2,933	49,709	17,906	29,813
	Average number of vehicles in a coaching train—												
49	1st class . . *No.*	1st half	0·81	1·33	0·98	1·10	1·62	1·38	1·41	1·06	1·16	1·41	1·78
		2nd „	0 71	1·34	0·93	1 01	1·58	1·39	1·33	1·15	0 99	1 28	1·42
50	2nd „ . . „	1st half	1·04	1·26	1 99	1·09	1·43	1·67	1·58	1·17	1·12	1·16	1·66
		2nd „	1·06	1·30	2 00	0·96	1·44	1·69	1·54	1·23	1·03	1·14	1·41
51	3rd or intermediate class „	1st half	1·20	1·03	1·03	2·15	1·45	*1·00	0·27		1·33	1·51	0·90
		2nd „	1·25	1·17	1·02	2 13	1·50	*1 03	0·26		1·27	1·41	0·74
52	4th or lowest „ „	1st half	6·70	10·47	8 09	7·56	8·77	†5·33	9·44	5·41	8·63	7·25	15·53
		2nd „	7·03	9·28	7·72	7·15	8·93	†5·55	9·44	5·20	7 95	6·92	14·73
53	Other vehicles „	1st half	1·17	1·00	2·04	1·71	1·61	1·73	1·26	0·95	0·92	0·64	1·26
		2nd „	1·85	1·02	2·10	1·74	1·41	1·75	1·15	0 90	0·87	0·56	0·88
54	Brake-vans „	1st half	1·31	1 95	1·35	0·95	1·70	1·77	2·11	1·16	1·83	1·70	2 96
		2nd „	1·15	1·95	1·36	0·85	1·71	1·76	2·07	1·17	1·71	1·89	2·73
55	Total „	1st half	12·53	17·04	15·48	14·56	16·58	12·88	16 07	9·75	15·04	13·67	24·09
		2nd „	13·05	16·16	15·13	13 84	16·57	13·17	15·79	9·65	13·82	13·20	21·91
	Average earnings per coaching vehicle per mile—												
56	1st class . . *Pies*	1st half	5·86	14·92	21·84	23·11	16·14	17 99	21·07	16·53	13·74	12·80	10·83
		2nd „	8·53	13·01	19 18	18·57	12·94	16·35	17 99	10·46	12·07	10·41	7·06
57	2nd „ . . „	1st half	13·86	14 34	30 80	23·60	18·32	22 47	25·16	24·97	15·31	20·54	13·49
		2nd „	14·98	15·59	27·18	22·49	17·97	20·24	24·04	21·10	14·48	16·67	12·51
58	3rd or intermediate class „	1st half	23·40	18·90	63·51	28·98	34·06	38·97	25 96		29·17	29·33	34·70
		2nd „	29·44	16·31	66·45	28·97	33 48	38 09	22·03		26·45	29·39	34·60
59	4th or lowest „ „	1st half	63·95	44·92	58·41	57·97	52·96	43·55	55·05	41·18	46·71	51·45	31·23
		2nd „	65·05	49 22	52·07	51·59	51·61	41·03	50·34	37·38	40·48	42 25	28·63
60	Other vehicles „	1st half	25·95	47·76	45·73	37·70	60·72	54·81	69·63	52·44	77·42	94·56	69·71
		2nd „	27·37	48 57	39·27	55·40	61·58	47·10	68 21	37·44	82·29	74·90	61·40

* Third class by
† Third class by
‡ Including the Cawn

DIX 18—*continued.*

Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3' 3½"												2' 6".			Gauge Number.	Serial number.
4 (b) to (d)	8 (c)	11 (a)	11 (b)	12 (a) to (c)	14 (a) to (d)	15 (a)	18 (a) to (c)	19 (a)& (b)	20 (a) to (e)	21 (a) to (h)	22 (a)	2 (b)	2 (d)	9 (f) &(g)		
Eastern Bengal.	Hyderabad-Godavari Valley.	Assam-Bengal	Noakhali (Bengal)	Bengal and North-Western.‡	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian	Southern Mahratta.	Udaipur Chitor	Jubbulpore-Gondia extension.	Raipur-Dhamtari	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
0·91	1·24	0·94	0·07	0·39	1·12	1·25	1·00	0·94	1·12	1·34	1·84	...	0·20	0·96	1st half	36
0·94	0·91	1·01	0·23	0·45	1·00	1·10	0·78	0·93	0·94	1·11	0·87	...	0·13	0·93	2nd ,,	
2·97	7·24	1·82	1·31	0·92	7·65	4·00	3·72	4·22	3·82	4·13	3·08	...	0·48	0·56	1st half	37
3·13	6·37	2·07	1·39	0·98	6·50	3·75	3·04	5·08	3·87	3·74	2·65	...	0·35	0·73	2nd ,,	
10·55	...	0·88	1·42	3·23	9·66	...	...	1·91	...	...	4·39	...	1·36	...	1st half	38
14·44	...	1·02	0·82	3·69	8·21	...	...	1·61	...	...	5·35	...	0·67	...	2nd ,,	
175·18	181·33	188·45	140·38	200·51	218·17	222·89	208·76	173·66	200·64	184·16	266·37	...	84·97	98·58	1st half	39
180·55	168·66	177·80	141·53	206·15	179·03	185·95	159·10	143·67	295·01	175·21	210·87	...	59·28	95·60	2nd ,,	
189·61	189·81	192·09	143·18	205·05	236·60	228·14	213·48	180·73	305·58	189·63	275 68	...	86·91	100·10	1st half	40
199·06	175·94	181·90	143·97	211·27	194·74	190·80	162·92	151·29	299·82	180·06	219·74	...	60·38	97·26	2nd ,,	
1·11	1·78	1·23	0·11	0·56	1·49	0·72	2·04	0·89	0·67	1·47	3·01	...	0·25	0·39	1st half	41
1·57	0·98	1·42	0·19	0·81	1·07	0·96	1·05	0·96	0·67	1·42	1·38	...	0·24	0·32	2nd ,,	
794	322	321	2	1,861	295	1,350	350	194	1,080	1,197	24	...	5	39	1st half	42
743	328	337	7	1,869	274	1,421	373	211	1,081	1,221	20	...	5	50	2nd ,,	
748	321	308	1	1,638	354	1,700	335	192	1,310	1,220	24	...	5	12	1st half	43
625	304	323	6	1,658	328	1,762	347	209	1,312	1,159	19	...	5	18	2nd ,,	
1,274	...	287	3	1,808	261	...	...	125	...	...	28	...	...	...	1st half	44
1,252	...	234	11	1,860	291	...	...	117	...	...	29	...	...	...	2nd ,,	
5,846	1,465	2,340	18	15,635	1,833	12,024	2,852	1,837	13,751	9,078	228	...	105	479	1st half	45
5,617	1,768	2,177	79	16,903	2,000	13,488	2,899	1,824	14,775	9,002	240	...	109	537	2nd ,,	
838	147	390	...	429	127	1,749	296	58	1,345	927	8	...	5	27	1st half	46
761	129	407	...	430	126	935	314	55	1,384	901	5	...	5	33	2nd ,,	
546	298	222	2	21,371	408	906	811	276	1,253	1,195	49	...	26	62	1st half	47
581	288	223	10	2,220	419	1,263	822	307	1,230	1,226	52	...	27	71	2nd ,,	
10,046	2,554	3,868	26	23,674	3,278	17,729	4,645	2,682	18,742	13,617	361	...	145	619	1st half	48
9,580	2,812	3,701	114	24,951	3,438	18,868	4,754	2,723	19,782	13,509	365	...	151	709	2nd ,,	
1·48	1·12	1·71	0·84	1·69	2·20	1·51	1·73	1 30	1·14	1·67	1·15	...	0·31	0·77	1st half	49
1·35	1·14	1 95	0·87	1·71	1·74	1·49	1·54	1 33	1 09	1 72	1 06	...	0·29	0·80	2nd ,,	
1·40	1·11	1·65	0·73	1·48	2·63	1 90	1·65	1·30	1·38	1 70	1·49	...	0·31	0·28	1st half	50
1·14	1·07	1·87	0·86	1·52	2·08	1·84	1·44	1·32	1·32	1·64	1·04	...	0·29	0·29	2nd ,,	
2·38	...	1·53	1·42	1·63	1·94	...	...	0·84	...	...	1·78	...	...	...	1st half	51
2·28	...	1·36	1·52	1·70	1·85	...	...	0·74	...	...	1·57	...	...	...	2nd ,,	
10·93	5·07	12·51	9·91	14·12	13·61	13·47	14·08	12·39	14·50	12·67	13·95	...	7·16	9·38	1st half	52
10·24	6·24	12·59	10·45	15·46	12·68	14·11	12·01	11·53	14 85	12·70	12·72	...	5·95	8·60	2nd ,,	
1·57	0·51	2·09	0·03	0·38	0·94	1·96	1·46	0·39	1·42	1 29	0·47	...	0·33	0·53	1st half	53
1·39	0·46	2 36	0·01	0 39	0·80	0·98	1·30	0·35	1·39	1·27	0·25	...	0·27	0 52	2nd ,,	
1·02	1·03	1·19	1·33	2·08	3·03	1·02	4·00	1·96	1·32	1·67	2·93	...	1·78	1·22	1st half	54
1·06	1·02	1 28	1·35	2·03	2·66	1·32	3·40	1·94	1·24	1·73	2·73	...	1·44	1·15	2nd ,,	
18·78	8·84	20·68	14·26	21·38	24·35	19·86	22·92	18·08	19 76	19·00	22·08	...	9·89	12·13	1st half	55
17·46	9·93	21·41	15 06	22 81	21·81	19·74	19·69	17·21	19·89	19·06	19·37	...	8·24	11·36	2nd ,,	
8·44	6·49	8·13	1·40	2·92	5·86	12·84	8·11	18·90	11·63	11·27	22·68	...	10 19	14·32	1st hal	56
9·54	5·23	7·79	3·78	2·49	6 47	11·44	6·64	19·37	10·19	9·90	14·70	...	6·93	12·85	2nd ,,	
13·68	16·79	8 11	14·14	3·58	16·38	16·64	13·52	28·58	16·55	14·79	18·58	...	11·16	13·46	1st half	57
16·77	16·32	8·51	12·50	3·60	17·59	15·35	12·95	34·50	17·34	13 92	22·90	...	8·22	13·60	2nd ,,	
13·82	...	2·58	4·49	6·09	19·90	...	...	9·11	...	...	7·58	...	...	...	1st half	58
19·16	...	3·39	2·43	6·30	12·76	...	...	8·72	...	...	10·18	...	...	...	2nd ,,	
40·08	40·47	45·16	42·51	28·36	44·07	49·86	30·45	30·64	42 53	30·40	38·04	...	36·37	23·64	1st half	59
44·08	32 76	43·32	40·64	26·65	38·82	39·25	27·34	27·42	40 75	28 91	33·05	...	30·40	25·01	2nd ,,	
33·91	63·89	26·44	...	72·66	75·78	16·09	47·94	136·93	27·33	50·90	125·21	...	33·72	41·64	1st half	60
55·63	48·63	24·17	...	87·48	64·39	33·89	34·89	186·60	24·58	49·91	186·92	...	37·08	35·68	2nd ,,	

mail trains.
other than mail trains.
pore-Burhwal link.

Appendix 18.
Analysis.

APPEN
(Appendix 4
Analysis of working of each railway

NOTE.—These statistics are no

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (e)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (d)
		Calendar year 1908 by half-years.	Bengal Central	Bengal-Nagpur	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	COACHING TRAFFIC—*contd.* VEHICLES AND VEHICLE-MILEAGE—*concld.* Carrying capacity hauled one mile (excluding brakes) (in thousands)—												
61	1st class . . . . *Seats*	1st half	2,132	16,630	19,647	13,634	79,368	59,761	12,336	4,875	58,048	37,621	21,360
		2nd „	1,853	11,673	20,985	13,430	73,906	63,542	12,625	4,916	54,411	38,176	19,569
62	2nd „ . . . . „	1st half	3,277	20,689	74,184	15,624	110,114	141,989	27,059	7,746	68,673	31,802	23,514
		2nd „	2,973	18,422	77,439	14,291	109,080	131,348	27,285	8,256	72,808	33,684	23,020
63	3rd or intermediate class . „	1st half	9,638	37,087	45,916	61,084	235,223	*167,558	8,659		145,979	62,422	26,758
		2nd „	9,296	38,098	44,059	58,383	218,496	*187,456	8,547	94,965	156,982	66,299	25,214
64	4th or lowest class . . „	1st half	54,314	561,428	393,721	245,067	1,752,404	†896,476	545,401	88,507	1,401,897	469,850	605,049
		2nd „	52,925	495,370	390,634	241,298	1,731,009	†942,188	561,889		1,519,704	517,296	656,810
65	Other vehicles . . . *Tons*	1st half	3,437	9,732	7,570	8,784	58,289	29,890	5,973	5,153	33,830	18,952	8,330
		2nd „	3,913	8,548	9,548	10,016	53,250	30,320	5,566	5,133	48,220	19,979	6,690
	Percentage of freight upon capacity hauled—												
66	1st class . . . *Per cent.*	1st half	2·26	7·67	9·25	7·26	7·65	12·44	19·08	7·50	8·39	4·88	7·53
		2nd „	3·16	9·95	7·40	6·05	6·06	10·52	15·54	5·17	7·00	3·99	5·05
67	2nd „ . . . . „	1st half	8·74	13·33	15·54	14·90	14·29	22·03	28·69	27·47	17·22	17·53	18·08
		2nd „	10·07	16·54	12·67	13·85	11·50	19·96	32·17	21·24	15·36	14·26	16·69
68	3rd or intermediate class „	1st half	12·12	15·40	45·00	19·46	22·05	*25·99	18·03		28·30	27·88	46·17
		2nd „	15·89	14·87	46·70	20·91	23·25	*23·46	15·37	35·47	25·54	27·90	46·18
69	4th or lowest class . „	1st half	38·29	35·42	42·90	40·44	37·03	†39·86	42·30	32·41	39·15	38·36	47·23
		2nd „	39·06	39·23	40·73	36·01	36·24	†37·95	39·56		38·80	31·86	48·51
70	Other vehicles . . „	1st half	3·99	11·00	26·05	8·67	20·19	30·42	40·01	8·83	17·20	9·58	36·53
		2nd „	3·76	11·41	28·66	11·39	19·01	25·52	37·77	5·55	11·16	7·72	38·66
	WEIGHT OF TRAIN AND TON-MILEAGE. Gross ton-mileage of all coaching trains (in thousands)—												
71	Freight	1st half	1,483	13,693	15,205	7,706	55,667	36,387	17,190	2,672	42,613	14,277	21,430
		2nd „	1,506	13,334	14,456	7,327	52,260	34,602	16,413	2,171	42,592	13,077	20,839
72	Dead weight	1st half	28,244	2,41,346	209,251	126,307	925,436	710,539	232,016	40,627	678,282	269,230	211,103
		2nd „	26,495	2,83,504	214,757	130,296	911,305	733,369	237,659	40,683	746,905	296,666	215,141
73	Total	1st half	29,727	255,039	224,456	134,013	981,103	746,926	249,207	43,299	720,896	283,506	232,533
		2nd „	28,001	246,838	229,213	137,623	963,566	767,971	254,072	42,855	789,497	309,743	235,980
74	Average weight of a coaching train—												
	Freight . . . . . *Tons*	1st half	10·19	14·05	17·39	13·69	16·32	10·93	17·15	8·64	13·81	11·96	18·14
		2nd „	11·11	13·70	15·90	12·50	15·74	10·32	15·80	7·14	11·84	9·64	15·31
75	Dead weight . . . . . „	1st half	194·00	247·61	239·34	224·38	271·33	218·37	231·42	181·40	219·80	225·52	178·71
		2nd „	195·41	239·86	236·26	222·27	274·54	218·65	228·74	133·88	207·67	218·69	158·08
76	Total . . . . . „	1st half	204·19	261·66	256·73	238·07	287·65	224·30	248·57	140·04	233·61	237·48	196·85
		2nd „	206·52	253·56	252·16	234·77	290·28	228·97	244·54	141·02	219·51	228·33	177·39
	COST OF WORKING AND PROFIT—												
77	Average cost of hauling a coaching train one mile . . R	1st half	1·60	1·31	1·88	1·95	0·95	1·12	1·57	1·54	1·28	0·91	1·46
		2nd „	1·49	1·35	2·21	1·16	0·96	1·39	1·82	1·36	1·01	1·11	1·56
78	Average cost of hauling a coaching vehicle with its load one mile . . . . . *Pies*	1st half	27·32	16·62	25·50	27·55	12·32	19·44	21·55	15·27	18·66	14·65	13·25
		2nd „	24·10	18·28	30·82	17·16	12·27	23·36	25·48	14·54	16·02	18·87	15·58
	Average cost of hauling a coaching unit one mile—												
79	Per passenger unit . . . *Pies*	1st half	1·80	1·11	1·36	1·60	0·78	1·39	1·15	1·01	1·17	0·97	1·02
		2nd „	1·52	1·16	1·75	1·08	0·80	1·76	1·44	1·11	1·14	1·49	1·27
80	Other traffic per ton . . „	1st half	32·78	12·74	14·52	37·35	5·01	11·81	9·78	9·04	9·11	5·76	7·16
		2nd „	31·61	15·56	18·62	18·36	5·25	16·49	12·53	12·50	6·41	8·72	8·68
81	Average profit on working a coaching train one mile . R	1st half	1·08	1·67	1·66	1·26	2·51	1·11	1·99	2·21	1·58	1·80	1·90
	Average profit on working a coaching vehicle one mile—	2nd „	1·46	1·61	1·04	1·79	2·40	0·73	1·41	1·58	1·35	1·03	1·19
82	1st class . . . . . *Pies*	1st half	*—21·46*	*—1·70*	*—3·66*	*—4·44*	3·82	*—1·45*	0·48	1·26	*—4·92*	1·85	*—2·42*
		2nd „	*—15·57*	*—5·27*	*—11·64*	1·41	0·57	*—7·01*	*—7·49*	*—4·08*	*—3·95*	*—8·46*	*—8·52*
83	2nd „ . . . . . „	1st half	*—13·46*	*—2·28*	5·30	*—3·95*	6·00	3·03	3·61	9·70	2·85	5·89	0·24
		2nd „	*—9·12*	*—2·09*	*—3·64*	5·33	5·60	*—3·12*	*—1·44*	6·56	*—1·54*	*—2·20*	*—3·07*
84	3rd or intermediate class . „	1st half	*—3·92*	2·28	43·01	1·43	21·74	*19·53	4·41		10·51	14·68	21·45
		2nd „	5·34	*—1·97*	35·63	11·81	21·11	*14·78	*—3·45*	25·91	10·43	10·52	19·02
85	4th or lowest class . . . „	1st half	36·63	28·30	27·91	30·42	40·64	†24·11	33·50	23·84	28·05	36·80	17·98
		2nd „	40·95	30·94	21·25	34·43	39·24	†17·67	24·86		24·46	23·38	13·05
86	Other vehicles . . . . „	1st half	*—1·37*	28·14	20·23	10·15	48·40	34·87	48·08	37·17	58·76	79·91	56·46
		2nd „	3·27	30·29	8·45	38·24	49·21	23·74	42·73	22·90	66·27	56·03	45·82

* Third class by
† Third class by
‡ Including the Cawn

DIX 18—*continued.*

in Report for 1902.]

(by systems) during each half-year of 1893—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (*b*) to (*d*).	8 (*c*).	11 (*a*).	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) & (*b*)	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*).	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern-Bengal.	Hyderabad-Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western. ‡	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South-Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari	Khushalgarh-Kohat Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
8,835	6,187	3,628	16	17,706	3,061	8,285	3,193	2,328	10,362	9,760	273	...	54	355	1st half	61
8,092	6,392	3,810	71	17,598	2,780	12,597	3,556	2,526	10,369	9,960	288	...	64	458	2nd „	
9,067	7,507	3,542	14	25,020	4,874	17,028	4,194	2,308	14,290	15,117	292	...	54	140	1st half	62
7,529	6,987	3,727	70	24,852	4,703	27,288	4,308	2,505	14,310	14,323	285	...	64	220	2nd „	
24,012	...	7,356	68	40,023	3,695	...	...	2,644	...	...	680	...	...	...	1st half	63
23,867	...	4,996	293	40,778	3,946	...	...	2,265	...	...	715	...	3,216	...	2nd „	
183,390	65,699	81,843	619	459,856	53,109	355,130	92,341	60,210	436,580	292,616	6,628	...	3,344	10,815	1st half	64
176,414	77,599	77,462	2,747	484,076	58,128	408,667	92,642	60,192	467,210	288,376	6,950	...		12,044	2nd „	
3,710	3,475	1,213	...	1,191	492	6,912	3,723	302	3,158	2,713	31	...	2	222	1st half	65
3,608	3,463	1,257	...	1,330	519	3,464	3,928	267	3,260	2,648	19	...	2	80	2nd „	
5·49	3·28	4·85	0·78	2·45	4·95	13·44	6·32	5·99	10·24	9·85	11·06	...	5·44	13·34	1st half	66
6·36	2·45	4·56	2·44	2·78	5·68	8·33	5·27	5·83	9·06	7·88	6·90	...	3·51	12·65	2nd „	
17·51	15·75	9·60	16·56	4·09	21·12	20·95	18·02	27·10	25·34	19·60	17·22	...	12·95	20·45	1st half	67
22·84	15·67	9·62	14·95	4·29	21·31	13·16	17·02	32·06	26·88	18·52	21·25	...	10·01	20·92	2nd „	
23·52	...	2·24	3·74	8·94	35·21	...	...	10·75	...	...	10·53	...	...	...	1st half	68
33·19	...	3·56	2·13	9·83	32·80	...	...	11·27	...	...	14·14	...	39·35	...	2nd „	
51·11	45·11	43·05	40·62	48·23	55·31	56·02	45·81	42·77	65·31	45·10	65·61	...	32·94	46·51	1st half	69
56·15	37·33	39·68	38·88	46·58	48·57	43·50	41·45	37·77	62·80	43·06	51·27	...		49·56	2nd „	
16·07	8·16	19·72	...	51·81	40·80	9·30	11·03	43·68	20·07	38·89	105·54	...	159·55	8·89	1st half	70
23·87	4·86	19·58	...	66·60	32·51	26·54	6·47	57·05	20·54	37·99	135·96	...	179·64	25·09	2nd „	
6,734	2,177	2,408	16	14,343	2,138	12 977	3,021	1,758	18,137	9,307	305	...	81	329	1st half	71
7,469	2,010	2,147	67	14,779	2,038	11,978	2,636	1,611	18,675	8,746	276	...	71	388	2nd „	
71,921	29,002	35,329	257	170,644	20,422	155,774	35,782	18,896	140,415	107,759	2,913	...	650	2,930	1st half	72
70,258	31,996	34,341	1,150	179,102	21,997	173,959	37,976	19,596	148,947	106,658	3,039	...	726	3,411	2nd „	
78,656	31,179	37,737	272	184,993	22,560	168,751	38,803	20,154	158,552	117,066	3,218	...	730	3,259	1st half	73
77,727	34,006	36,488	1,217	193,881	24,035	185,937	40,612	21,207	167,622	115,404	3,315	...	798	3,798	2nd „	
12·58	7·54	12·88	8·73	12·96	15·88	14·54	14 91	11·85	19·12	12 99	18 69	...	5·49	6·44	1st half	74
13·61	7·10	12·42	8·87	13·51	12·93	12·53	10·92	10·18	18·78	12·34	14·65	...	3·87	6·21	2nd „	
134·43	100·43	138·93	143·35	154 10	151·68	174·51	176·58	124·04	148·06	150·86	178·41	...	44·27	57·43	1st half	75
128·06	112·97	198·65	152·47	163·76	139·49	181·96	157·34	123·85	149·77	150·51	161·00	...	39·50	54·62	2nd „	
147·01	107·97	201·81	152·08	167·06	167·56	189·05	191·49	135·89	167·18	163·35	197·10	...	49·76	63·87	1st half	76
141·67	120·07	211·07	161·34	177·27	152·42	194·49	168·26	134·03	168·55	162·85	175·65	...	43·37	60·83	2nd „	
1·28	1·33	2·26	7·15	0·79	1·64	1·69	1·15	0·94	1·11	1·37	2·27	...	0·63	1·33	1st half	77
1·03	1·91	2·61	2·03	0·87	1·65	1·82	1·31	1·07	1·22	1·47	2·09	...	0·67	1·44	2nd „	
13·89	18·51	22·27	36·18	7·84	14·74	17·21	11·70	11·09	11·60	15·16	22·88	...	14·85	23·38	1st half	78
12·09	24·94	24·90	28·37	8·06	16·55	19·01	15·39	13·45	12·57	16·24	24·12		18·99	27·13	2nd „	
1·15	1·27	2 04	3·26	0·72	1·26	1·27	0·89	0·97	0·65	1·27	1·52	...	1·33	2·43	1st half	79
0·87	2·00	2·46	2·70	0·73	1·55	1·73	1·39	1·31	0·73	1·44	1·78	...	2·05	2·71	2nd „	
24·87	7·90	33·07	...	5·71	10·89	47 30	14·84	6·18	23·67	14·27	7·95	...	19·51	31·93	1st half	80
15·80	15·08	37·85	...	3·24	14·12	21·76	22·96	6·98	24·95	15·73	7·86	...	23·43	41·98	2nd „	
1·61	1·10	1·13	*—4·83*	1·54	2·35	2·24	1·64	1·68	2·49	1·21	1·23	...	0·82	0·91	1st half	81
2·12	0·24	0·65	0·33	1·56	1·60	1·47	0·78	1·32	2·29	0·98	0·63	...	0·35	*—0·15*	2nd „	
—5·45	*—12·02*	*—14·06*	*—34·78*	*—4·94*	*—8·88*	*—4·37*	*—3·59*	7·81	0·03	*—3·89*	*—0·20*	...	*—4·66*	*—9·06*	1st half	82
—2·55	*—19·71*	*—17·11*	*—24·59*	*—5·57*	*—10·08*	*—7·57*	*—8·75*	5·92	*—2·38*	*—6·34*	*—9·42*	...	*—12·06*	*—14·28*	2nd „	
—0·21	*—1·72*	*—14·16*	*—22·04*	*—4·26*	1·64	*—0·57*	1·82	17·49	4·95	*—0·37*	*—4·30*	...	*—3·69*	*—9·92*	1st half	83
4·68	*—8·62*	*—16·39*	*—15·87*	*—4·46*	1·04	*—3·66*	*—2·44*	21·05	4·77	*—2·32*	*—1·20*	...	*—10·77*	*—13·53*	2nd „	
—0·67	...	*—19·69*	*—31·69*	*—1·75*	5·16	...	...	*—1·98*	...	...	*—15·30*	...		...	1st half	84
7·07	...	*—21·51*	*—25·94*	*—1·76*	1·21	...	...	*—4·73*	...	...	*—13·94*	...	21·52	...	2nd „	
25·19	21·96	22·89	6·33	20·52	29·33	32·65	18·75	19·55	30·93	15·24	15·16	...	11·41	0·26	1st half	85
31·99	7·82	17·42	12·27	18·59	22·27	20·24	11·95	13·97	28·18	12·67	8·93	...		*—2·12*	2nd „	
20·02	45·38	4·17	...	64·22	61·04	*—1·12*	36·24	125·89	15·73	35·74	102·33	...	18·87	18·26	1st half	86
43·54	23·69	*—0·73*	...	79·42	47·84	14·88	19·50	173·15	12·01	33·67	162·80	...	18·09	8·55	2nd „	

mail trains.
other than mail trains.
pore-Burhwal link.

Appendix 18.
Analysis.

APPEN

(Appendix 46 in

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number.	1 (*a*)	2(*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*e*).	7 (*a*) to(*c*)	8 (*a*) & (*b*)	9 (*a*) to(*e*)	10 (*a*) & (*b*)	3 (*g*) to (*l*)
		Calendar year 1908 by half-years.	Bengal-Central.	Bengal-Nagpur.	Bombay, Baroda, and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana Malwa.
	COACHING TRAFFIC—*concld.*												
	Cost of Working and Profit—*concld.*												
	Average profit on working a coaching unit one mile—												
87	Per passenger unit . . *Pies*	1st half	1·31	1·35	1·16	1·12	1·89	1·14	1·31	1·30	1·26	1·71	1·15
		2nd „	1·59	1·31	0·83	1·63	1·86	0·74	0·96	1·18	1·29	1·13	0·87
88	Other traffic per ton . . „	1st half	7·68	28·40	15·42	10·42	27·32	22·61	27·00	24·85	28·77	33·93	26·79
		2nd „	15·12	33·69	8·83	31·05	23·05	19·12	26·19	23·97	24·70	28·18	19·58
	GOODS TRAFFIC.												
	Gross Receipts and Train Mileage— *(In thousands.)*												
89	Receipts from goods traffic . R	1st half	1,25	49,61	75,47	17,33	2,52,53	2,62,67	51,94	20,68	1,62,67	39,72	84,83
		2nd „	4,75	39,53	46,59	43,15	2,31,98	1,58,85	46,70	14,39	1,83,25	27,73	59,41
90	Goods train miles run . . No.	1st half	53	1,293	667	384	5,027	5,026	1,323	410	3,943	1,022	1,554
		2nd „	131	1,313	448	621	4,479	3,300	1,276	302	4,172	842	1,369
91	Average goods receipts per train-mile . . . . R	1st half	2·35	3·84	11·32	4·64	5·02	5·23	3·93	5·04	4·13	3 88	4·58
		2nd „	3·62	3·01	10·41	6·95	5·18	4·66	3·66	4·76	4·39	3·29	4·34
	Units and Unit-Mileage. *(In thousands.)*												
92	Tons of goods carried one mile	1st half	3,432	192,908	181,803	53,996	1,140,953	760,310	151,417	61,876	585,733	148,150	239,294
		2nd „	12,188	167,924	112,769	99,628	1,886,490	463,337	131,728	43,977	727,756	109,352	175,286
93	Average sum received for carrying a ton one mile . *Pies*	1st half	7·02	4·94	7·97	6 34	4·25	6·63	6·59	6 42	5·33	5 15	6 81
		2nd „	7·48	4·52	7·98	8·32	4·10	6·28	6·81	6 28	4·84	4·87	6·51
94	Average number of tons in a train . . . . . *Tons.*	1st half	64·41	149·24	272·59	140·51	226·97	151·26	114·41	123·44	144·58	144·90	129 07
		2nd „	92·90	127·93	251·95	160·44	242·59	140·29	108·23	109·92	174 45	129·82	127·99
	Vehicles and Vehicle-Mileage— Number of goods vehicles hauled one mile— *(In thousands.)*												
95	Loaded . . . *Vehicle-miles*	1st half	579	21,711	20,905	8,017	101,212	93,317	22,284	6,210	73,013	20,825	44,842
		2nd „	1,958	17,940	14,280	13,526	97,341	65,843	20,773	4,112	81,537	15,761	32,248
96	Empty . . . „	1st half	159	10,242	6,538	2,134	51,126	37,309	8,429	3,7 8	30,148	7,182	11,953
		2nd „	1,549	8,466	4,047	6,952	52,250	19,350	7,375	2,610	34,942	5,913	8,298
97	Brake vans . . . „	1st half	53	2,626	539	392	4,720	2,505	2 097	721	4,421	1,091	1,600
		2nd „	115	2,577	292	631	4,486	6,375	1,957	511	4,603	814	1,069
98	Total . . . . „	1st half	821	34,578	27,982	10,543	157,069	140,132	32,810	10,719	107,585	29,098	58,395
		2nd „	3,622	28,982	18,620	21,108	154,078	91,569	30,105	7,232	121,082	22,483	41,715
	Average number of vehicles in a goods train—												
99	Freight vehicles . . . No.	1st half	14·43	24·72	41·15	26·41	30·31	25·89	23·21	19·95	26·16	27·39	30·64
		2nd „	26·73	20·12	40 95	32·18	33·40	25·82	22·06	16·80	27·92	25 73	29·68
100	Brake-vans . . . . „	1st half	1·00	2·03	0·81	1·02	0 94	1 89	1·59	1 44	1 12	1 07	0·86
		2nd „	0·88	1·95	0 65	1·01	1·00	1 93	1·58	1·28	1 10	0 97	0·78
101	Total . . . . . „	1st half	15·43	26·75	41·96	27·43	31·25	27 8	24 80	21 39	27·28	28·46	31·50
		2nd „	27·61	22 08	41·60	33·99	34·40	27·75	23 59	18 08	29 02	26 70	30·46
102	Average earnings per goods vehicle per mile (excluding brakes) . . . . *Pies.*	1st half	31·34	29·81	52·80	33 73	31·83	38·61	32 47	39·70	30·28	27·22	28·68
		2nd „	25 99	28·74	48 81	40 45	29 78	34·67	31 86	41·12	30 21	24·57	28·06
103	Carrying capacity hauled one mile (excluding brakes) . *Tons.*	1st half	11,114	477,745	354,408	124,818	2,312,678	1,783,507	410,318	137,162	1,461,884	344,293	481,927
		2nd „	51,110	398,256	248,141	258,257	2,131,878	1,195,097	381,414	93,610	1,592,713	269,664	349,033
104	Percentage of freight upon capacity hauled . . . *Per cent.*	1st half	30·88	40·38	51·30	43·26	51·56	42·58	36·90	45·11	41·78	43·03	49·65
		2nd „	23·85	42·16	45 45	38 58	50 96	38 77	34 54	46·98	45·69	40,55	50·22
105	Average load of a goods vehicle (including both loaded and empty) per mile . . *Tons.*	1st half	4·46	6·04	6·62	5·32	7·49	5·82	4·93	6·19	5·68	5·29	4·21
		2nd „	3 48	6·36	6 15	4·81	7·26	5·44	4 68	6·54	625	5,05	4·31
106	Average load of a loaded goods vehicle per mile . „	1st half	5·92	8·89	8·70	6·74	11·27	8·15	6·79	9·96	8,02	7 11	5·34
		2nd „	6·25	9·36	7·90	7·37	11·16	7·04	6 34	10 70	8·93	6·91	5·44
	Weight of Train and Ton-Mileage— Gross ton-mileage of all goods trains— *(In thousands.)*												
107	Freight . . . . . *Tons.*	1st half	3,432	192,908	181,803	53,996	1,140,953	760,310	151,417	61,876	585,733	148,150	239,294
		2nd „	12,188	167,924	114,769	99,628	1,086,490	463,337	131,728	43,977	727,756	109,353	175,286
108	Dead weight . . . . „	1st half	9,750	341,448	226,427	102,60	1,458,935	1,363,711	321,621	106,816	1,036,388	285,278	266,459
		2nd „	35,441	304,078	151,721	201,507	1,431,491	907,224	301,525	77,873	1,147,207	224,706	192,794
109	Total . . . . . „	1st half	13,181	534,357	408,230	156,598	2,599,887	2,122,021	473,038	168,693	1,622,121	433,229	505,754
		2nd „	47,629	472,002	264,490	301,135	2,517,981	1,370,561	433,253	121,850	1,876,963	334,059	365,080

* Including the Cawnpore

DIX 18—*continued.*

Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (b) to (d)	8 (c)	11 (a)	11 (b)	12 (a) to (c)	14 (a) to (d)	15 (a)	18 (a) to (c)	19 (a) & (b)	20 (a) to (e)	21 (a) to (h)	22 (a)	2 (b)	2 (d)	9 (f) & (g)	Number.	Serial number.
Eastern Bengal.	Hyderabad-Godavari Valley.	Assam Bengal.	Noakhali (Bengal).	Bengal and North-Western.*	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Kushalgarh Kohat-Thal and Nowshera Durgai.	Calendar year 1903 by half-years.	
1·50	0·88	1·06	—0·19	1·33	1·67	1·90	1·26	1·51	1·49	0·99	0·67	...	1·74	—0·07	1st half	87
1·78	0·14	0·67	0·37	1·27	1·39	1·41	0·80	1·29	1·40	0·82	0 38	...	1·02	—0·35	2nd ,,	
22·77	25·19	10·05	...	44·77	37·11	—3·53	19·55	54·09	31·34	30·45	19·71	...	24·53	24·84	1st half	88
33·86	22·07	2·64	...	39·26	34·07	12·71	20·13	60·82	25·84	28 96	27·00	...	19·57	16·07	2nd ,,	
17,49	8,85	3,77	1	39,25	5,78	38,43	9,67	605	28,51	31,91	40	8	18	32	1st half	89
26,36	4,80	6,35	7	24,70	2,73	28,43	6,85	378	27,66	26,27	25	8	10	60	2nd ,,	
607	278	256	1	1,209	147	1,297	277	181	922	1,108	9	1	12	49	1st half	90
711	218	226	4	868	73	1,175	236	138	954	1,036	7	7	12	92	2nd ,,	
2·88	3·18	1·47	1·29	3·25	3·95	2·96	3·49	3 35	3·09	2·88	4·26	8·25	1·47	0·65	1st half	91
3·71	2·20	281	1·66	2·85	3·71	2·41	2·69	2·73	2·90	2·54	3·58	1·10	0·80	0·65	2nd ,,	
47,067	17,512	13,375	6	130,078	10,066	99,880	24,858	17,242	75,286	88,423	466	135	499	600	1st half	92
64,068	10,254	22,552	220	83,736	5,122	81,740	17,363	10,920	73,979	74,301	298	241	378	1,400	2nd ,,	
7·13	9·68	5·41	25·37	0·79	11 09	7·39	7·47	6·73	7·27	6·93	16 55	12·05	7·05	10·26	1st half	93
7·90	8·98	5 41	6·43	5·66	10·22	6·68	7·18	6·65	7·18	6·79	16,52	5·97	4·85	8·24	2nd ,,	
77 51	40·09	52·26	9·73	107·59	68·65	76·94	89·74	95·41	81·61	79·80	49·42	131·44	40·02	12·19	1st half	94
90 16	26·39	99·98	49·62	96·47	69·75	69·55	73·68	78 85	77·56	71·72	41·59	35·23	31·64	15·15	2nd ,,	
13,812	3,403	2,994	7	24,626	2,871	21,315	4,813	2,882	14,765	19,341	134	16	84	347	1st half	95
14,737	2,421	3,688	46	18,666	1,327	18,433	3,532	1,950	14,926	17,911	92	13	51	528	2nd ,,	
2,845	1,40	1,521	2	9,384	1,391	8,977	2,329	1,541	4,661	5,154	83	16	41	123	1st half	96
3,934	1,062	1,831	24	6,249	599	7,431	1,736	1,122	5,267	4,421	40	7	18	171	2nd ,,	
644	556	229	1	1,612	142	1,252	48	282	614	1,494	...	...	27	57	1st half	97
708	436	294	7	1,322	28	1,582	30	205	658	1,454	...	...	14	71	2nd ,,	
17,301	5,440	4,644	10	35,632	4,404	31,544	7,190	4,641	19,980	25,989	217	32	152	527	1st half	98
19,379	3,949	5,813	77	24,337	1,954	27,445	5,298	3,277	20,801	23,786	141	25	83	769	2nd ,,	
27·43	11·18	17·25	14·32	28·15	29·07	23·35	25·78	24·40	20·99	22·11	23·08	31 50	10 01	9·56	1st half	99
26·27	9·04	24·47	15·84	26·51	26·22	22·01	22·35	22·18	21·12	21·56	19·76	3·60	5·79	7·57	2nd ,,	
1·06	1·27	0·89	1·60	1·33	0·97	0·96	0·17	1·28	0·67	1·35	...	...	2·20	1·15	1st half	100
1·00	1·12	1·30	1·60	1·52	0·38	1·34	0·13	1·48	0·69	1·40	...	...	1·18	0·76	2nd ,,	
28·49	12·45	18 14	16·42	29·18	30·04	24·31	25·95	25·28	21·66	23·46	23·08	31·50	12 21	10·71	1st half	101
27·27	10·16	25·77	17·44	28·08	26·60	23·35	22·48	23,66	21·81	23·96	19·76	3·60	6·97	8·33	2nd ,,	
20·16	34·78	16 38	16·66	22·15	26·06	24·36	26·01	26·33	28·27	25·01	35·43	50 29	28 17	13·10	1st half	102
27 11	26·22	22·09	20·10	20·61	27·18	21·11	23·13	23·65	26·37	22·59	34·78	58·51	26·48	16·50	2nd ,,	
122,648	47,424	39,094	87	279,781	26,100	231,319	63,381	48,642	133,577	172,118	1,764	387	723	1,776	1st half	103
142,664	33,454	52,564	677	189,445	12,957	189,706	47,349	30,899	138,363	157,766	1,134	294	417	2,654	2nd ,,	
38·38	36·93	34·21	6·79	46·49	38·56	43·16	39·22	39·51	56·36	51·37	26·42	84·94	68·61	33·80	1st half	104
44·91	30·65	42·90	32·47	44·20	39·53	43·09	36·67	35·54	53·47	47·10	26·26	82·13	90·71	52·76	2nd ,,	
2·83	3·59	3·03	0·66	3·82	2·36	3·20	3·43	3·21	3·89	3·61	2·14	4·17	4·00	1·28	1st half	105
3·43	2·92	4·09	3·13	3·64	2·66	3·16	3·30	3·55	3·67	3·33	2·10	3·80	5·47	2·60	2nd ,,	
3·41	5·15	4·62	0·84	5·28	3·51	4·68	5·17	6·01	5·12	4·57	3·47	8·22	5·93	1·73	1st half	106
4·35	4·23	6·12	4·77	5·02	3·86	4·13	4·92	5·60	4·95	4·15	3·21	13·78	7·36	2·65	2nd ,,	
47,067	17,512	13,375	6	130,078	10,066	99,880	24,858	17,242	75,286	88,423	466	135	499	600	1st half	107
64,068	10,254	22,552	220	83,735	5,122	81,740	17,363	10,920	73,979	74,301	298	241	378	1,400	2nd ,,	
90,503	34,100	26,348	62	173,951	20,001	172,593	37,303	24,344	110,416	138,170	1,191	296	645	2,098	1st half	108
108,253	24,845	11,643	333	124,772	9,211	161,963	28,901	17,552	115,120	127,942	828	415	445	3,583	2nd ,,	
187,570	51,613	39,723	68	304,029	30,067	272,522	62,160	41,585	185,701	226,593	1,657	431	1,141	2,698	1st half	109
167,322	35,099	34,195	553	208,507	14,333	242,503	46,264	28,472	189,099	202,243	1,126	656	823	4,983	2nd ,,	

Burhwal link.

Appendix 18.
Analysis.

APPEN
(Appendix 46.
Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″.										
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (l)
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North-Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	GOODS TRAFFIC—*concld.*												
	WEIGHT OF TRAIN AND TON-MILEAGE—*concld.*												
	Average weight of a goods train—												
110	Freight . . . . Tons	1st half	64·40	149·24	272·59	140·51	226·97	151·26	114·44	123·44	148·53	144·90	129·07
		2nd „	92·90	127·93	251·95	160·44	242·59	140·39	103·23	109·92	174·45	129·82	127·99
111	Dead-weight . . . . „	1st half	182·99	264·16	339·50	266·98	290·22	270·91	243·08	213·10	262·81	279·03	143·73
		2nd „	270·14	231·66	338·97	324·50	319·62	274·90	236·20	194·64	275·48	266·76	140·77
112	Total . . . . . „	1st half	247·39	413·40	612·09	407·49	517·19	422·17	357·52	336·54	411·34	423·93	272·80
		2nd „	363·04	359·59	590·92	484·94	562·21	415·29	239·53	304·56	449·93	396·58	268·76
	COST OF WORKING AND PROFIT.												
113	Average cost of hauling a goods train one mile . . R	1st half	1·93	2·06	4·48	3·34	1·72	2 12	2·25	2·00	2·26	1·63	2 02
		2nd „	2·63	1·92	5·18	2·40	1·85	2·52	2·53	1·84	2·07	1·93	2·41
114	Average cost of hauling a goods vehicle with its load one mile . . . . *Pies*	1st half	25 74	16·02	20·88	24·29	10·87	15·64	18·64	15·79	16·59	11·43	12·67
		2nd „	18·86	18·31	24·29	13·96	10·65	18·72	22·01	15·85	14·25	14·40	15·61
115	Average cost of hauling a goods unit (*viz.*, one ton) one mile . . . . . „	1st half	5·77	2·65	3·15	4·57	1·45	2·69	3·78	2·55	2·92	2·16	3·01
		2nd „	5·43	2·88	3·95	2·87	1·47	3·44	4·70	2·42	2·28	2·85	3·62
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum. . . . . „	1st half	10·17	6·47	5·87	8·18	2·99	4·76	7·91	5·26	6·07	4·86	5·03
		2nd „	7·99	7·32	7·58	5·49	3·10	6·41	9·30	5·99	4·86	6·23	6·08
116	Average profit on working a goods train one mile . R	1st half	0·42	1·78	6·84	1·30	3·30	3·11	1·68	3·04	1·87	2·25	2·56
		2nd „	0·99	1·09	5·23	4·55	3·33	2·14	1·13	2·92	2·32	1·36	1·93
117	Average profit on working a goods vehicle with its load one mile . . . *Pies*	1st half	5·60	13·79	31·92	9·44	20·96	22·97	13·83	23·94	13 69	15·79	16·01
		2nd „	7·13	10·43	24·54	26·49	19·13	15·95	9·85	25·27	15·96	10·17	12·45
118	Average profit on working a goods unit (*viz.*, one ton) one mile . . . . . „	1st half	1·25	2·29	4·82	1·77	2·80	3·94	2·81	3·87	2·41	2·99	3·80
		2nd „	2·05	1·64	3·98	5·45	2·63	2·94	2·11	3·86	2·56	2·02	2·89
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.												
	Percentage on Total Earnings—												
119	Coaching traffic . . *Per cent.*	1st half	62·82	35·18	28·28	46·65	31·31	21·79	39·47	19·35	34·60	40·48	31·28
		2nd „	45·06	40·18	37·84	27·27	31·82	31·23	40·45	21·44	31·31	46·56	37·47
120	Goods traffic . . . „	1st half	20·23	60·04	69·03	46·06	67·06	77·22	57·43	77·82	63·86	49·74	66·81
		2nd „	53·44	55·17	59·63	67·94	66·27	67·71	56·26	73·14	67·47	44·53	59·41
121	Sundries, including telegraph . . . . „	1st half	16·95	4·58	2·69	7·29	1·35	0·99	3·10	2·83	1·53	9·78	1·91
		2nd „	1·50	4·47	2·53	4·79	1·57	1·06	3·29	5·42	1·22	8·91	3·12
122	Steam-boat earnings . „	1st half	...	0·20	...	...	0·28	...	...	...	...	...	...
		2nd „	...	0·18	...	...	0·34	...	...	...	...	...	...
	Total . „	1st half	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
		2nd „	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
	Percentage of working Expenses on Total Earnings—												
123	Maintenance . . . *Per cent.*	1st half	21·68	12·42	9·37	15·61	7·59	7·34	13·15	9·81	14·72	9·88	9·37
		2nd „	13·66	13·39	11·59	6·90	8·25	8·44	15·56	12·72	11·38	16·86	11·64
124	Locomotive expenses . „	1st half	13·02	15·08	16·31	19·08	10·68	19·13	18·99	16·89	21·86	13·90	16·31
		2nd „	12·55	17·02	20·26	10·17	10·53	25·91	24·64	11·07	19·86	16·66	20·36
125	Carriage and wagon expenses . . . „	1st half	6·01	3·55	6·43	9·14	1·82	4·41	5·51	3 24	3·27	3·70	6·43
		2nd „	3·85	4·02	7·86	4·55	2·31	6·61	6·76	3·61	3·69	4·41	7·90
126	Traffic expenses . . „	1st half	10·89	8·49	6 74	16·51	7·34	6·68	7·64	4 91	7·52	8·54	6·74
		2nd „	10·10	10·20	8·67	11·11	7·52	9·82	8·66	6·59	7·36	10·72	8·71
127	General charges . . „	1st half	13·34	6·85	4 04	5·70	3·29	3·12	4·91	4·21	3·38	3·88	4·04
		2nd „	9·24	8·19	5·19	3·41	3·43	4·78	5·94	6·03	2·99	5·02	5·21
128	Miscellaneous expenses „	1st half	6·00	3·69	1·50	2·80	2·19	2·59	2·10	2·22	1·31	1·74	1·79
		2nd „	13·69	5·07	2·23	2·81	2·32	3·44	2·40	2·46	1·15	2·91	2·29
129	Steam-boat expenses . „	1st half	...	0·91	...	...	0·29	...	...	...	0·03	...	...
		2nd „	...	0·94	...	...	0·26	...	...	...	0·03	...	...
130	TOTAL WORKING EXPENSES „	1st half	71·04	50·99	44·39	68·34	33·20	43·27	52·30	41·28	52·09	41·64	44·68
		2nd „	63·09	58·83	55·80	38·95	34·62	58·10	63·96	42·48	46·46	56·58	56·11

* Including the Cawnpore-

DIX 18—*continued.*

in Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (b) to (d)	8 (c)	11 (a)	11 (b)	12 (a) to (c)	14 (a) to (d)	15 (a)	18 (a) to (c)	19 (a) & (b)	20 (a) to (e)	21 (a) to (h)	22 (a)	2 (b)	2 (d)	9 (f) & (g)	Number.	Serial number.
Eastern Bengal.	Hyderabad Godavari Valley.	Assam-Bengal.	Noakhali (Bengal)	Bengal and North-Western.*	Bhavnagar-Gondal Junagad-Porbandar.	Burma.	Jodhpur Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore Gondia extension.	Raipur Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half years.	
77·51	40·08	52·26	9·73	107·59	68·66	76·94	89·74	95·41	81·61	79·81	49·42	131·43	40·02	12·19	1st half	110
90·16	26·39	99·98	49·62	96·47	69·75	69·55	73·69	78·85	77·56	71·72	41·59	35·23	31·64	15·15	2nd „	
149·03	78·05	102·94	101·78	143·88	136·42	133·10	134·67	134·71	119·69	124·70	126·22	237·45	51·67	42·61	1st half	111
145·30	63·94	51·62	75·21	143·65	125·44	137·05	122·06	126·74	120·70	123·50	115·68	60·62	37·21	38·77	2nd „	
226·54	118·13	155·20	111·51	251·47	205·08	210·04	224·41	230·12	201·30	204·51	175·64	418·88	91·69	54·80	1st half	112
235·46	90·33	151·60	124·83	240·12	195·19	206·60	195·75	205·59	198·26	195·22	157·27	95·85	68·85	53·92	2nd „	
1·98	1·29	1·74	1·79	1·19	2·00	1·88	1·35	1·59	1·34	1·71	2·03	5·86	1·16	1·14	1st half	113
1·72	1·56	1·87	1·57	1·18	2·11	1·94	1·52	1·64	1·44	1·76	1·87	2·66	1·07	1·28	2nd „	
13·86	14·15	19·36	23·14	8·09	13·23	15·43	10·06	12·49	12·27	14·88	16·37	35·70	22·16	22·90	1st half	114
12·55	18·50	14·71	19·02	8·55	15·47	16·90	13·07	14·20	13·06	15·66	18·20	141·34	35·38	32·68	2nd „	
4·90	3·94	6·39	35·25	2·12	5·60	4·68	2·89	3·19	3·16	4·12	7·88	8·57	5·55	17·95	1st half	115
3·66	6·34	3·60	6·07	2·35	5·82	5·85	3·97	3·99	3·56	4·71	8·64	14·48	6·47	16·23	2nd „	
9·35	8·41	15·38	...	4·60	11·76	8·49	5·39	5·78	6·18	9·23	29 16	111·59	13·72	46·36	1st half	115 A.
7·20	12·57	8·69	14·69	5·59	13·74	9·65	6·02	7·50	6·74	10·57	41·94	97·13	15·47	31·71	2nd „	
0·90	1·89	*—0·27*	*—0·50*	2·06	1·95	1·08	2·14	1·76	1·75	1·17	2·23	2·39	0·31	*—0·49*	1st half	116
1·99	0·64	0·94	0·09	1·67	1·60	0·47	1·17	1·09	1·46	0·78	1·71	*—1·56*	*—0·27*	*—0·63*	2nd „	
6·30	20·63	*—2·98*	*—6·48*	14·06	12·83	8·93	15 95	13·84	16·00	10·13	18·56	14·59	6·01	*—9·80*	1st half	117
14·56	7·72	7·38	1·08	12·06	11·71	6·45	10·06	9·45	13·31	6·93	16·58	*—83·33*	*—8·90*	*—16·18*	2nd „	
2·23	5·74	*—0·98*	*—9·88*	1·33	5·43	2·71	4·58	3·54	4·11	2·81	8·67	3·49	1·50	*—7·69*	1st half	118
4·24	2·64	1·81	0·36	3·31	4·40	1·33	3·21	2·66	3·62	2·08	7·88	*—8·51*	*—1·62*	*—7·99*	2nd „	
43·02	29 84	58·69	84·10	36·99	47·42	46·85	35·96	37·59	53·21	36·14	58·06	...	49·83	67·67	1st half	119
35·91	41·65	42·79	70·76	47·49	63·67	51·36	43·11	48·28	53·97	39·05	64·94	...	57·55	56·39	2nd „	
48·60	66·58	34·84	15·88	53·62	51·07	51·34	61·60	58·55	44·40	62·44	40·84	38·59	42 94	31·67	1st half	120
54·81	54·15	48·23	29·24	42·94	33·84	46·39	54·07	48·29	42·79	59·07	32·33	32·23	29·39	42·02	2nd „	
1·49	3·58	5·63	0·02	2·76	1·51	1·56	2·44	3·86	2·39	1·42	1·10	61·41	7·23	0·66	1st half	121
1·12	4·20	8·25	...	2·65	2·49	1·94	2·82	3·43	3·24	1·88	2·73	67·72	13·06	1·59	2nd „	
6·89	...	0·84	...	6·63	...	0·25	...	...	...	...	...	...	...	...	1st half	122
8·16	...	0·73	...	6·92	...	0·31	...	...	...	..	...	...	...	...	2nd „	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	1st half	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	2nd „	
18·02	14·63	24·92	...	9·71	11·76	14·40	6·60	10 82	6·16	11·82	13·76	4·93	18·39	30·66	1st half	123
13·52	28·32	20·60	...	11·68	13·06	17·33	17·84	12·60	8·35	14·69	15·25	29·39	29·99	50·72	2nd „	
13·97	12·38	19·47	...	9·59	13·43	20·15	19·28	11·45	14·05	20·44	20 14	3·26	19·06	49·53	1st half	124
9·48	19·35	15·75	...	10·68	14·63	24·78	24·28	12·49	17·69	22·70	23·83	19·10	24·63	44·41	2nd „	
4·37	1·67	5·18	...	2·15	2·99	3·99	2·44	3 58	4·12	6·14	5·47	0·69	3·60	6·98	1st half	125
2·56	2·38	5·05	...	2 52	2·79	5·33	2·55	4·78	3·23	6·74	7·83	2·99	4·29	16·29	2nd „	
10·50	8·11	13·22	...	6·90	8·75	8·57	5·20	7·48	6·59	8·92	9·59	3·49	6·39	18·81	1st half	126
8·14	12·66	12·75	...	8·18	10·63	10 84	6·51	9·01	6·50	9·88	11·16	10·24	8·33	20·35	2nd „	
5·07	8 97	18 94	...	4·48	8 87	6·01	4·02	8·26	5·69	9·04	7·76	15·65	8·43	13·89	1st half	127
3·43	14·58	16·17	...	5·82	11·63	7·43	5·24	10·94	5·77	10·18	8·46	17·70	10·96	12·80	2nd „	
2·07	1·26	4·18	...	1·80	1·08	1·11	2·76	0·56	1 10	1·40	1·61	0·07	0·81	3·10	1st half	128
1·15	2·12	4·31	...	2·05	1·32	1·81	2·50	1·70	1·15	2·01	1·45	0·53	0·89	2·80	2nd „	
8·17	...	0·81	...	2·62	...	1·96	...	...	...	...	...	...	...	4·49	1st half	129
6·05	...	0·78	...	3·20	...	0·83	...	...	...	...	...	...	...	4·09	2nd „	
62·17	47·02	86·72	110·36	37·25	46·88	56·19	40·30	42 15	37·71	57·76	58·33	27·99	56·68	127·46	1st half	130
44·33	79·41	75·41	...	44·13	54·06	68 35	58·92	51·52	42·69	66·20	67·98	79·95	79·09	151·46	2nd „	

Burhwal link.

Appendix 18.
Analysis.

APPEN
(Appendix 46

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*c*)	7 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*e*)	10 (*a*) & (*b*)	3 (*g*) to (*l*)
		Calendar year 1903 by half-year	Bengal-Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North-Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	PER MILE OF LINE MAINTAINED.								TABLE A.—MAINTENANCE OF				
131 *a*	General superintendence (including office expenses) . . Rs.	1st half	126·16	110·14	189·47	273·83	211·25	129·37	143·13	129·95	133·97	136·32	90·97
		2nd „	132·45	119·65	179·87	283·56	213·98	134·22	143·55	130·90	134·62	132·32	94·73
132 *a*	Maintenance and renewal of permanent-way . . . „	1st half	830·17	302·89	787·19	1,419·09	598·12	467·02	410·99	407·78	530·07	241·30	377·95
		2nd „	671·80	260·97	672·66	683·01	633·51	292·77	445·89	313·68	363·46	466·00	354·21
133 *a*	Repairs of bridges, &c. . . „	1st half	26·09	102 33	115·80	64·73	143·26	155·47	86·21	74·80	69·07	127·87	55·60
		2nd „	56·26	79·00	117·21	192·16	119·92	111·81	141·54	128·13	87·00	80·06	61·71
134 *a*	Conservancy of rivers . . „	1st half	...	...	...	5·79	...	...	...	...	12·86	1·34	...
		2nd „	2·96	...	...	5·65	...	...	...	0·32	13·68	9·54	...
135 *a*	Repairs of stations and buildings „	1st half	79 92	61·98	120·81	315·27	241·20	119·28	79·83	50·71	136·92	101·31	58·00
		2nd „	85·86	58·13	133·96	358·52	222·57	103·95	65·31	48·33	101·64	92·12	70·54
136 *a*	Other charges (net) . . „	1st half	13·11	38·03	92·30	98·29	109·80	62·87	160·19	80·06	126·40	73·23	41·31
		2nd „	21·06	47·75	47·09	95·68	124·44	75·22	152·04	90·70	125·14	108·15	24·80
137 *a*	Total maintenance, &c. . „	1st half	1,075·45	615·37	1,305·57	2,177·00	1,303·63	934·01	880·35	743·30	1,009·29	681·37	626·83
		2nd „	970·39	565·50	1,150·79	1,573·58	1,314·42	717·97	948·38	713·71	825·54	888·19	605·99
	PER MILE OF TRACK, INCLUDING SIDINGS.												
131 *b*	General superintendence (including office expenses) . . Rs.	1st half	104·64	97·50	125·96	144·21	137·69	96·30	118 62	115·78	105·89	119·07	78·02
		2nd „	109·86	105·39	119·65	149·12	138·66	99·83	118·91	116·57	106·40	115·58	81·10
132 *b*	Maintenance and renewal of permanent-way . . . „	1st half	688·56	268·14	523·33	747·36	389·86	347·63	340·39	368·35	418·96	210·77	324·16
		2nd „	577·21	229·86	447·45	335·51	410·54	217·77	369·35	279·30	287·29	407·04	303·28
133 *b*	Repairs of bridges, &c. . „	1st half	21·64	90·59	76·99	34·09	93·38	115·72	71·44	66·64	54·59	111·70	47·69
		2nd „	46·66	69·58	77 97	101·05	77·71	83·17	117·25	114·10	68·77	69·93	52·84
134 *b*	Conservancy of rivers . . „	1st half	...	...	...	3·05	...	...	...	...	10·16	1 17	...
		2nd „	2·45	...	...	2 97	...	...	...	0·28	10·81	8·34	...
135 *b*	Repairs of stations and buildings „	1st half	66·29	54·87	80·32	166 04	157·21	88·78	66·16	45·19	108·22	88·49	49·75
		2nd „	71·21	51·20	89·11	188·54	144·24	77·32	54·09	43·13	80·34	80·46	60·40
136 *b*	Other charges (net) . . „	1st half	10·87	33·67	61·35	51 76	71·58	46·80	132·75	71·35	99·91	63·96	38·01
		2nd „	17·47	42·05	31·32	50·31	80·64	55·94	125·94	82·21	98·90	94·47	21·23
137 *b*	Total maintenance, &c. . „	1st half	892·00	544·77	867·95	1,146·51	849·71	695·23	729 56	662·31	797·73	595·16	537·63
		2nd „	804·86	498·08	765·50	827·50	851·79	534·03	785·54	635·59	652·51	775·82	518·85
	PER TOTAL TRAIN-MILE.												
131 *c*	General superintendence (including office expenses) . . Rs.	1st half	1·27	1·29	1·55	1·28	0·88	0·66	1 35	1·33	1·13	1·14	0·91
		2nd „	0·99	1·42	1·67	1 05	0·96	0·86	1·35	1·65	1·04	1·14	1·07
132 *c*	Maintenance and renewal of permanent-way . . . „	1st half	8·35	3·56	6·41	6 66	2·49	2 39	3·88	4·17	4·48	2·02	3·78
		2nd „	5·03	3·10	6·24	2·36	2·86	1·88	4·20	3·95	2·81	4·00	3·99
133 *c*	Repairs of bridges, &c. . „	1st half	0·26	1·20	0·94	0·30	0·59	0·80	0·81	0·77	0·58	1·07	0·55
		2nd „	0·42	0·94	1·09	0·71	0·54	0·72	1·33	1·61	0·67	0·69	0 69
134 *c*	Conservancy of rivers . . „	1st half	...	...	...	0 03	...	...	...	...	0·11	0·01	...
		2nd „	0·02	...	...	0·02	...	...	...	...	0 11	0·09	...
135 *c*	Repairs of stations and buildings „	1st half	0·81	0·74	0·99	1 48	1·00	0·61	0·76	0·52	1·16	0·85	0·58
		2nd „	0 65	0·69	1 24	1·32	1·00	0·67	0·62	0·60	0·78	0·79	0·80
136 *c*	Other charges (net) . . „	1st half	0·13	0·45	0·75	0·46	0·46	0·32	1·51	0·83	1·07	0·61	0·45
		2nd „	0·16	0·56	0·44	0 35	0·56	0·48	1·43	1·17	0·96	0·93	0·27
137 *c*	Total maintenance, &c. . „	1st half	10·82	7·24	10·64	10·21	5·42	4·78	8·31	7·62	8·53	5·70	6·27
		2nd „	7·27	6·71	10·68	5 81	5·92	4·61	8·93	8·98	6·37	7·64	6·82
	PER 1,000 GROSS TON-MILES.												
131 *d*	General superintendence (including office expenses) . . Rs.	1st half	0·37	0·23	0·23	0·26	0·13	0 12	0 27	0·20	0·21	0·22	0·23
		2nd „	0·22	0·28	0·29	0·18	0 13	0·17	0·29	0·28	0·19	0·39	0·30
132 *d*	Maintenance and renewal of permanent-way . . . „	1st half	2·42	0·64	0 98	1·36	0 37	0·44	0·77	0·68	0·84	0·39	0·97
		2nd „	1·11	0 62	1·07	0·41	0·40	0·37	0·88	0·67	0·51	1·37	1·13
133 *d*	Repairs of bridges, &c. . „	1st half	0·08	0·22	0·14	0·06	0·08	0·15	0·16	0·12	0·11	0·21	0·14
		2nd „	0·09	0·18	0·18	0·12	0 08	0·14	0·28	0·27	0·12	0·24	0·20
134 *d*	Conservancy of rivers . . „	1st half	...	...	...	0·01	...	...	...	...	0·02	...	...
		2nd „	0·01	...	...	...	...	...	...	...	0·02	0·02	...
135 *d*	Repairs of stations and buildings „	1st half	0·23	0·13	0·15	0·30	0·15	0·11	0·15	0 08	0·22	0·16	0·15
		2nd „	0·14	0·14	0 21	0·23	0·14	0·13	0·13	0·11	0·15	0·27	0·22
136 *d*	Other charges (net) . . „	1st half	0 03	0·08	0·12	0 09	0·07	0 06	0·30	0·14	0·20	0·12	0·12
		2nd „	0·03	0·11	0·08	0·06	0·07	0·09	0·30	0·19	0·17	0·32	0·08
137 *d*	Total maintenance, &c. . „	1st half	3·13	1·30	1·62	2·08	0·80	0·87	1·65	1·22	1·60	1·10	1·61
		2nd „	1·60	1·33	1 83	1·00	0·82	0·90	1·88	1·52	1·16	2·61	1 93

* Excluding the Cawnpore-Burhwal link

DIX 18—*continued.*

in Report for 1902.)

(by systems) during each half year of 1903—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (b) to (d)	8 (c)	11 (a)	11 (b)	12 (a) to (c)	14 (a) to (d)	15 (a)	18 (a) to (c)	19 (a) & (b)	20 (d) to (e)	21 (a) to (h)	22 (a)	2 (b)	2 (d)	9 (f) & (g)	Number.	Serial number.
Eastern Bengal.	Hyderabad-Godavri Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western. *	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera Durgai.	Calendar year 1903 by half-years.	
WAY, WORKS AND STATIONS.																
110·19	105·88	119·06		98·00	75·19	114·24	23·63	69·87	105·34	82·17	49·81	...	8·69	114·26	1st half	131a
119·61	106·71	114·75		105·98	62·46	121·92	23·44	74·58	107·01	81·15	46·58	23·39	7·46	158·79	2nd „	
481·89	215·50	185·94		234·04	195·19	451·73	65·71	195·37	171·38	194·59	118·52	35·41	113·33	127·01	1st half	132a
438·38	211·48	193·85		197·16	148·18	439·21	207·26	212·43	271·96	175·01	115·42	65·54	107·09	219·78	2nd „	
64·50	56·85	55·57		66·45	3·42	89·54	15·73	48·86	18·56	27·72	9·04	...	8·64	29·25	1st half	133a
57·10	132·44	45·26		87·51	2·87	73·88	5·58	42·79	17·02	50·67	1·14	...	4·91	110·50	2nd „	
0·01	...	...		10·63	...	0·14	...	6·70	...	...	...	...	...	...	1st half	134a
0·10	...	...		3·05	...	0·20	...	—2·57	...	...	...	...	...	...	2nd „	
105·12	38·11	41·89		52·29	11·20	102·08	10·08	54·87	28·19	30·09	17·73	...	16·66	17·09	1st half	135a
151·51	55·42	36·09		48·62	11·11	77·26	4·77	29·82	42·65	45·94	10·54	...	23·02	26·92	2nd „	
121·81	80·64	26·92		42·93	13·39	65·31	10·55	20·61	—3·23	32·84	11·19	...	—8·28	19·53	1st half	136a
123·40	134·93	31·21		47·51	11·16	81·97	13·06	31·41	—21·85	44·66	6·00	...	30·80	33·59	2nd „	
883·52	496·98	429·38		504·34	298·39	823·69	125·75	396·28	320·24	367·41	201·29	33·41	139·54	307·14	1st half	137a
890·10	640·98	421·26		489·83	235·78	794·44	254·11	388·46	416·79	397·43	179·68	88·93	173·28	549·53	2nd „	
94·40	95·30	105·17		85·01	68·45	98·68	22·59	61·96	93·89	74·01	46·72	...	8·12	105·02	1st half	131b
102·21	95·99	101·57		91·88	56·85	105·82	22·40	66·38	95·36	73·06	43·69	20·68	7·03	146·45	2nd „	
412·85	193·96	164·30		203·02	177·70	391·03	62·82	173·28	152·75	175·25	106·48	33·18	107·02	116·73	1st half	132b
374·59	190·23	171·68		170·94	134·90	381·20	198·01	188·94	242·37	157·55	108·26	57·93	100·69	202·70	2nd „	
55·27	51·17	49·09		57·65	3·11	77·51	15·09	43·33	16·54	24·96	8·48	...	8·12	26·88	1st half	133b
48·80	119·13	40·07		75·88	2·62	64·12	5·32	38·07	15·17	45·62	1·07	...	4·61	101·91	2nd „	
0·01	...	...		9·22	...	0·12	...	5·94	...	...	...	...	...	...	1st half	134b
0·08	...	...		2·65	...	0·17	...	—2·29	...	...	...	...	...	...	2nd „	
90·06	34·30	37·02		45·36	10·20	88·35	9·63	48·66	25·12	27·10	16·64	...	15·66	15·70	1st half	135b
129·47	49·86	31·95		42·15	10·11	67·06	4·56	26·52	38·01	41·36	9·89	...	21·64	24·82	2nd „	
104·36	72·56	23·78		37·24	12·19	56·52	10·09	18·29	—2·68	29·57	4·50	...	—7·78	12·96	1st half	136b
105·45	121·37	27·62		41·14	19·17	71·15	12·48	27·92	—19·47	40·21	5·63	...	28·95	30·98	2nd „	
756·95	447·81	379·36	Included with the Assam-Bengal.	437·50	271·65	712·41	120·22	351·46	285·42	330·89	188·82	33·18	131·19	282·29	1st half	137b
760·60	576·58	372·89		424·64	214·64	689·52	242·77	345·49	371·44	357·80	168·54	78·61	162·92	506·86	2nd „	
1·13	1·40	2·70		0·92	1·92	1·09	0·66	0·97	1·11	1·19	2·06	...	0·29	1·84	1st half	131c
1·11	1·71	2·96		1·16	1·93	1·22	0·65	1·04	1·14	1·22	1·92	4·20	0·22	2·14	2nd „	
4·95	3·06	4·21		2·18	4·97	4·33	1·80	2·67	1·81	2·80	4·74	16·58	3·77	2·05	1st half	132c
4·07	3·40	5·01		2·15	4·59	4·41	5·73	2·91	2·89	2·64	4·77	11·78	3·18	2·99	2nd „	
0·67	0·80	1·26		0·62	0·09	0·86	0·44	0·67	0·20	0·40	0·37	...	0·23	0·47	1st half	133c
0·53	2·13	1·17		0·95	0·09	0·74	0·15	0·58	0·18	0·77	0·04	...	0·15	1·51	2nd „	
...	...	...		0·09	...	...	...	0·09	...	...	...	...	...	...	1st half	134c
...	...	...		0·03	...	...	...	—0·04	...	...	...	...	...	...	2nd „	
1·08	0·34	0·95		0·49	0·28	0·98	0·27	0·75	0·30	0·43	0·74	...	0·55	0·23	1st half	135c
1·40	0·89	0·93		0·53	0·35	0·78	0·14	0·41	0·45	0·69	0·43	...	0·68	0·37	2nd „	
1·25	1·15	0·61		0·40	0·34	0·62	0·29	0·28	—0·04	0·47	0·45	...	—0·27	0·32	1st half	136c
1·15	2·17	0·82		0·52	0·35	0·82	0·36	0·43	—0·23	0·67	0·24	...	0·91	0·46	2nd „	
9·08	7·05	9·73		4·70	7·60	7·88	3·46	5·43	3·38	5·29	8·36	16·53	4·62	4·96	1st half	137c
8·26	10·30	10·89		5·34	7·31	7·97	7·03	5·33	4·43	5·99	7·40	15·98	5·14	7·49	2nd „	
0·37	0·50	0·96		0·26	0·64	0·34	0·19	0·32	0·38	0·39	0·68	...	0·26	1·94	1st half	131d
0·36	0·61	1·05		0·34	0·73	0·38	0·22	0·38	0·39	0·42	0·70	2·74	0·26	2·39	2nd „	
1·64	1·92	1·51		0·64	1·66	1·31	0·54	0·89	0·62	0·93	1·36	2·47	3·41	2·16	1st half	132d
1·30	1·20	1·77		0·65	1·73	1·37	1·96	1·09	0·98	0·91	1·74	7·68	3·72	3·30	2nd „	
0·22	0·27	0·45		0·18	0·03	0·27	0·13	0·22	0·07	0·13	0·12	...	0·26	0·50	1st half	133d
0·17	0·75	0·41		0·29	0·03	0·23	0·06	0·21	0·06	0·26	0·01	...	0·17	1·66	2nd „	
...	...	...		0·03	...	...	...	0·03	...	...	...	...	...	...	1st half	134d
...	...	...		0·01	...	...	...	—0·01	...	...	...	...	...	...	2nd „	
0·36	0·18	0·34		0·14	0·10	0·30	0·09	0·25	0·10	0·15	0·23	...	0·50	0·29	1st half	135d
0·45	0·31	0·33		0·16	0·12	0·24	0·05	0·15	0·16	0·24	0·15	...	0·80	0·41	2nd „	
0·41	0·38	0·21		0·12	0·11	0·20	0·08	0·10	—0·02	0·16	0·14	...	—0·25	0·33	1st half	136d
0·37	0·76	0·28		0·16	0·14	0·26	0·12	0·16	—0·08	0·23	0·09	...	1·06	0·50	2nd „	
3·00	2·35	3·48		1·37	2·54	2·45	1·03	1·81	1·15	1·76	2·73	2·47	4·18	5·22	1st half	137d
2·65	3·63	3·84		1·61	2·75	2·48	2·41	1·98	1·51	2·06	2·69	10·42	6·01	8·26	2nd „	

and Saganli-Raxaul railway.

Appendix 18.
Analysis.

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(Appendix 46

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number.	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (l).
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North-Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
			TABLE B.—LOCOMOTIVE EXPEN										
	Average price of fuel per ton in terms of . . coal . .	1st half	6·18	3·46	17·72	6·45	2·03	10·52	10·90	4·67	13·99	7·70	16·72
		2nd ,,	6·19	3·31	16·74	6·47	1·97	10·75	11·47	4·66	14·09	7·69	17·86
	wood . .	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.												
138a	General superintendence (including office expenses) . . . Annas	1st half	0·60	0·83	1·22	0·79	0·62	0·53	0·62	0·76	0·67	0·53	0·72
		2nd ,,	0·45	0·82	1·25	0·66	0·66	0·68	0·71	0·85	0·59	0·53	0·80
139a	Running expenses . . ,,	1st half	1·12	2·21	3·29	2·23	2·21	2·71	1·92	1·81	1·65	1·05	1·94
		2nd ,,	0·98	2·17	3·33	1·95	2·15	2·88	1·93	1·89	1·53	1·11	2·13
140a	Fuel . . . . ,,	1st half	2·09	1·46	6·98	2·71	0·98	4·18	4·50	2·09	4·92	3·09	4·12
		2nd ,,	2·39	1·40	6·48	2·72	0·90	4·10	4·83	1·93	4·90	2·94	4·13
141a	Water . . . . ,,	1st half	0·15	0·22	0·48	0·17	0·11	0·33	0·27	0·27	0·23	0·10	0·28
		2nd ,,	0·18	0·19	0·49	0·18	0·13	0·31	0·30	0·27	0·21	0·12	0·31
142a	Oil, tallow and other stores . . . . ,,	1st half	0·29	0·21	0·46	0·38	0·35	0·37	0·36	0·35	0·23	0·26	0·27
		2nd ,,	0·27	0·32	0·47	0·37	0·33	0·36	0·37	0·33	0·23	0·23	0·30
143a	Maintenance and renewal of locomotives . . ,,	1st half	1·93	1·08	4·70	5·26	2·11	2·84	2·76	7·35	3·52	1·16	2·77
		2nd ,,	2·16	1·90	5·52	1·57	2·29	3·78	4·26	1·69	2·23	1·23	3·53
143A (a)	Maintenance and renewal of machinery, tools and plant . . . . ,,	1st half	0·05	0·23	0·46	0·32	0·14	0·16	0·10	0·20	0·20	0·10	0·27
		2nd ,,	0·03	0·16	0·53	0·58	0·15	0·24	0·11	0·21	0·25	0·14	0·34
144a	Other charges (net) . . ,,	1st half	0·27	1·65	0·92	0·61	1·11	1·33	1·29	0·29	1·25	1·72	0·54
		2nd ,,	0·22	1·57	0·61	0·53	0·95	1·30	1·62	0·64	1·17	1·25	0·39
145a	Total locomotive expenses . . . . ,,	1st half	6·50	8·79	18·51	12·47	7·63	12·46	11·82	13·12	12·67	8·01	10·91
		2nd ,,	6·68	8·53	18·68	8·56	7·56	13·66	14·13	7·81	11·11	7·55	11·93
	Fuel consumed in terms of . . coal* lbs.	1st half	37·81	59·13	55·14	58·88	67·13	55·66	57·80	62·72	49·29	50·51	34·46
		2nd ,,	43·17	59·15	54·21	58·93	64·21	53·48	58·91	58·43	48·71	48·15	32·44
	wood ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
	PER ENGINE-MILE.												
138b	General superintendence (including office expenses) . . . . . Annas	1st half	0·51	0·73	1·02	0·56	0·48	0·46	0·52	0·64	0·58	0·45	0·61
		2nd ,,	0·35	0·70	1·05	0·46	0·53	0·59	0·59	0·73	0·53	0·46	0·68
139b	Running expenses . . ,,	1st half	0·93	1·94	2·74	1·56	1·74	2·37	1·61	1·53	1·45	0·90	1·66
		2nd ,,	0·77	1·87	2·79	1·35	1·71	2·50	1·60	1·60	1·35	0·95	1·79
140b	Fuel . . . . ,,	1st half	1·75	1·28	5·83	1·90	0·77	3·65	3·78	1·79	4·33	2·63	3·51
		2nd ,,	1·87	1·21	5·43	1·89	0·72	3·57	3·99	1·64	4·38	2·54	3·50
141b	Water . . . . ,,	1st half	0·12	0·19	0·40	0·12	0·09	0·29	0·22	0·24	0·20	0·09	0·24
		2nd ,,	0·13	0·17	0·41	0·12	0·10	0·27	0·25	0·23	0·19	0·10	0·27
142b	Oil, tallow and other stores . . . . ,,	1st half	0·24	0·18	0·39	0·27	0·28	0·33	0·30	0·29	0·21	0·22	0·23
		2nd ,,	0·21	0·27	0·39	0·26	0·27	0·31	0·31	0·28	0·20	0·20	0·25
143b	Maintenance and renewal of locomotives . . ,,	1st half	1·62	1·74	3·92	3·69	1·66	2·48	2·32	6·27	3·09	0·99	2·36
		2nd ,,	1·69	1·64	4·63	1·09	1·82	3·29	3·53	1·44	1·97	1·06	2·99
143A (b)	Maintenance and renewal of machinery, tools and plant . . . . ,,	1st half	0·04	0·20	0·38	0·23	0·10	0·14	0·09	0·18	0·18	0·08	0·23
		2nd ,,	0·03	0·14	0·45	0·40	0·12	0·21	0·09	0·18	0·22	0·12	0·29
144b	Other charges (net) . . ,,	1st half	0·23	1·44	0·77	0·43	0·87	1·16	1·08	0·25	1·10	1·47	0·46
		2nd ,,	0·18	1·35	0·51	0·36	0·75	1·13	1·34	0·53	1·03	1·08	0·33
145b	Total locomotive expenses . . . . ,,	1st half	5·44	7·70	15·45	8·76	5·99	10·87	9·92	11·19	11·14	6·83	9·30
		2nd ,,	5·23	7·35	15·66	5·93	6·02	11·89	11·70	6·63	9·82	6·51	10·10
	Fuel consumed in terms of . . coal* . lbs.	1st half	31·63	51·82	46·03	41·32	52·77	48·57	48·55	53·47	43·32	43·05	29·36
		2nd ,,	33·75	51·00	45·43	40·87	51·10	46·54	48·77	49·57	43·05	41·52	27·45
	wood . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...

* The standard used is Kurhurbaree coal, except in the case of the Nizam's Guaranteed State railway, which uses Singareni coal.

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in Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (*b*) to (*d*).	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) & (*b*).	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hyderabad-Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western.†	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
SES.																
7·67	6·93	7·04		6·07	17·46	13·46	...	...	14·38	10·36	17·83	2·22	3·35	18·00	1st half	
8·20	7·00	7·39		6·09	17·98	12·79	15·64	...	11·17	10·64	15·73	3·74	3·23	16·97	2nd ,,	
...	...	...		...	...	...	...	4·82	...	...	...	...	...	...	1st half	
...	...	...		...	...	...	...	4·10	...	...	...	...	...	...	2nd ,,	
0·63	1·06	1·08		0·36	0·94	0·38	0·53	0·75	0·64	0·87	1·95	...	0·70	0·94	1st half	138a
0·54	1·18	1·30		0·41	1·11	1·00	0·54	0·78	0·61	0·90	1·86	1·76	0·65	0·86	2nd ,,	
1·15	1·45	1·39		0·81	1·33	2·68	0·81	0·78	1·44	1·68	0·94	4·04	1·04	1·06	1st half	139a
1·02	1·56	1·48		0·86	1·47	2·74	0·78	0·78	1·47	1·74	0·84	2·31	0·92	0·96	2nd ,,	
1·98	1·98	2·38		1·76	3·76	4·10	5·00	2·33	3·39	2·50	5·07	3·01	0·60	3·37	1st half	140a
2·02	1·93	2·41		1·63	3·34	3·64	4·21	1·98	3·18	2·65	4·88	1·55	0·53	2·40	2nd ,,	
0·13	0·27	0·29		0·16	0·18	0·23	0·35	0·13	0·13	0·22	0·41	2·02	0·40	0·38	1st half	141a
0·14	0·27	0·28		0·15	0·20	0·29	0·34	0·13	0·14	0·23	0·43	0·13	0·35	0·46	2nd ,,	
0·20	0·27	0·21		0·18	0·32	0·34	0·43	0·20	0·21	0·14	0·28	2·10	0·14	0·52	1st half	142a
0·18	0·24	0·23		0·19	0·30	0·34	0·34	0·20	0·22	0·16	0·28	0·05	0·13	0·38	2nd ,,	
0·94	0·92	1·74		0·76	1·76	1·89	1·62	0·87	1·39	2·28	3·19	...	0·77	1·28	1st half	143a
0·98	0·81	1·91		0·94	1·81	2·65	1·46	0·84	3·10	2·07	3·96	0·34	0·27	0·52	2nd ,,	
0·18	0·18	0·03		0·01	0·12	0·14	0·12	0·13	0·12	0·29	0·39	...	0·02	0·05	1st half	143 A (*a*)
0·29	0·25	0·02		0·03	0·14	0·17	0·14	0·16	0·16	0·28	0·24	...	0·01	0·08	2nd ,,	
1·83	—0·17	0·53		0·69	0·25	0·71	1·24	0·56	0·39	1·18	0·03	...	1·13	0·42	1st half	144a
0·62	0·78	0·70		0·70	—0·21	0·57	1·74	0·41	0·51	1·23	...	3·70	1·36	0·90	2nd ,,	
7·04	5·96	7·60	Included with the Assam-Bengal.	4·73	8·66	11·02	10·10	5·75	7·71	9·16	12·26	11·17	4·80	8·01	1st half	145a
5·79	7·02	8·88		4·91	8·16	11·40	9·55	5·28	9·39	9·26	11·59	10·39	4·22	6·56	2nd ,,	
36·07	40·06	38·33		40·56	30·18	42·67	41·25	...	33·09	33·83	33·75	18·98	24·87	26·23	1st half	
34·49	38·60	39·94		37·56	26·02	41·61	37·53	...	39·89	34·85	34·41	57·92	23·13	19·81	2nd ,,	
...	...	...		...	...	...	...	80·96	...	...	...	...	...	...	1st half	
...	...	...		...	...	...	...	73·19	...	...	...	...	...	...	2nd ,,	
0·51	0·95	0·97		0·30	0·85	0·71	0·50	0·61	0·58	0·77	1·82	...	0·69	0·80	1st half	138b
0·44	1·05	1·07		0·24	1·01	0·83	0·51	0·65	0·55	0·80	1·74	1·65	0·65	0·74	2nd ,,	
0·93	1·30	1·22		0·68	1·20	2·17	0·77	0·62	1·31	1·30	0·88	4·04	1·02	0·89	1st half	139b
0·82	1·38	1·22		0·71	1·33	2·28	0·75	0·65	1·33	1·55	0·78	2·17	0·91	0·82	2nd ,,	
1·60	1·79	2·06		1·48	3·39	3·32	4·72	1·87	3·07	2·23	4·74	3·01	0·58	2·86	1st half	140b
1·63	1·72	1·99		1·37	3·02	3·04	3·99	1·65	2·89	2·86	4·58	1·46	0·53	2·05	2nd ,,	
0·11	0·24	0·26		0·14	0·16	0·23	0·33	0·10	0·11	0·20	0·38	2·02	0·39	0·32	1st half	141b
0·11	0·24	0·28		0·12	0·18	0·24	0·33	0·11	0·13	0·20	0·41	0·17	0·35	0·39	2nd ,,	
0·17	0·24	0·19		0·16	0·29	0·27	0·41	0·16	0·20	0·13	0·26	2·10	0·14	0·43	1st half	142b
0·14	0·22	0·19		0·16	0·27	0·28	0·38	0·17	0·20	0·14	0·26	0·05	0·13	0·33	2nd ,,	
0·76	0·84	1·53		0·64	1·58	1·53	1·53	0·70	1·26	2·03	2·98	...	0·76	1·09	1st half	143b
0·79	0·73	1·57		0·79	1·64	2·21	1·38	0·70	2·32	1·85	2·88	0·79	0·27	0·44	2nd ,,	
0·15	0·16	0·02		0·01	0·10	0·12	0·10	0·10	0·11	0·25	0·37	...	0·02	0·05	1st half	143 A (*b*)
0·24	0·23	0·02		0·03	0·13	0·14	0·12	0·13	0·14	0·25	0·22	...	0·01	0·07	2nd ,,	
1·49	—0·15	0·47		0·58	0·23	0·58	1·17	0·44	0·36	1·05	0·03	...	1·11	0·36	1st half	144b
0·50	0·70	0·58		0·59	—0·19	0·48	1·64	0·35	0·46	1·10	...	3·48	1·35	0·77	2nd ,,	
5·72	5·37	6·72		3·99	7·80	8·93	9·53	4·60	7·00	6·16	11·46	11·17	4·71	6·80	1st half	145b
4·67	6·27	6·87		4·11	7·39	9·50	9·05	4·41	8·52	8·25	10·87	9·77	4·20	5·61	2nd ,,	
29·26	36·12	34·40		34·23	27·19	34·58	38·90	...	30·03	30·14	31·57	18·98	24·44	22·27	1st half	
27·83	34·37	32·97		31·39	23·55	34·68	35·67	...	36·21	31·05	32·92	54·47	23·06	16·94	2nd ,,	
...	...	...		...	...	...	...	64·84	...	...	...	...	...	...	1st half	
...	...	...		...	...	...	...	61·14	...	...	...	...	...	...	2nd ,,	

† Including the Cawnpore-Burhwal link.

Appendix 18.
Analysis.

APPEN
(Appendix 46

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number.	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (l)
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	PER 1,000 GROSS TON-MILES.												
138c	General superintendence (including office expenses) . . Rs.	1st half	0·18	0·15	0·19	0·16	0·09	0·10	0·12	0·12	0·13	0·10	0·18
		2nd „	0·16	0·16	0·22	0·11	0·10	0·13	0·15	0·15	0·11	0·11	0·23
139c	Running expenses . . „	1st half	0·32	0·40	0·50	0·45	0·38	0·49	0·38	0·28	0·31	0·20	0·49
		2nd „	0·21	0·43	0·57	0·34	0·30	0·56	0·41	0·32	0·28	0·24	0·60
140c	Fuel . . . . . „	1st half	0·60	0·26	1·06	0·55	0·14	0·76	0·91	0·33	0·92	0·60	1·06
		2nd „	0·52	0·28	1·11	0·47	0·12	0·80	1·02	0·32	0·89	0·63	1·17
141c	Water . . . . . „	1st half	0·04	0·04	0·07	0·04	0·02	0·06	0·06	0·04	0·04	0·02	0·07
		2nd „	0·04	0·04	0·09	0·03	0·02	0·06	0·06	0 05	0·04	0·02	0·09
142c	Oil, tallow and other stores. „	1st half	0·09	0·03	0·07	0·03	0·05	0·07	0 07	0·06	0·05	0·05	0·07
		2nd „	0·06	0·07	0·08	0·06	0·05	0·07	0·08	0·06	0·04	0·05	0·08
143c	Maintenance and renewal of locomotives . . . „	1st half	0·56	0·36	0·71	1·07	0·31	0·52	0·56	1·19	0·66	0·23	0·72
		2nd „	0·48	0·37	0·95	0·27	0·32	0 73	0·90	0·29	0·40	0·26	0·99
143c A	Maintenance and renewal of machinery, tools and plant „	1st half	0·01	0·04	0·07	0·07	0·02	0 03	0·02	0·04	0·04	0·02	0·07
		2nd „	0·01	0·03	0·09	0·10	0·02	0 05	0 02	0·03	0·05	0·03	0·10
144c	Other charges (net) . . „	1st half	0·08	0·30	0·14	0·12	0·16	0·24	0·26	0·05	0·23	0·33	0·14
		2nd „	0·06	0·31	0·10	0·09	0·13	0·25	0·24	0·10	0·21	0·27	0·11
145c	Total locomotive expenses . „	1st half	1·88	1·58	2·81	2·54	1·12	2·27	2·38	2·11	2·38	1·55	2·80
		2nd „	1·47	1·69	3·21	1·47	1·06	2·66	2·98	1·32	2·02	1·61	3·37
	Fuel consumed in terms of coal* . lbs.	1st half	177·49	169·83	134·31	191·91	158·30	162·11	186·12	162·63	147·88	156·13	141·68
		2nd „	190·46	188·13	148·95	162·15	143·81	166·40	198·41	158·21	141·89	164·44	146·64
	Fuel consumed in terms of wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.												
146a	General superintendence (including office expenses) . Annas	1st half	0·30	0·16	0·44	0·46	0·15	0 12	0·16	0·12	0·10	0·12	0·26
		2nd „	0·22	0·16	0·48	0·38	0·16	0 21	0·18	0·22	0·11	0·12	0·30
147a	Repairs and renewals of coaching vehicles . „	1st half	1·97	0·45	2·59	4·13	0·14	0·97	0·93	0·40	0·91	1·26	1·53
		2nd „	1·50	0·55	2·63	1·58	0·24	1·39	1·59	0·80	0 95	1·07	1·68
148a	Repairs and renewals of goods vehicles . . . „	1st half	2·98	0·70	3·50	1·01	0·71	1·25	1·59	1·55	0·47	0·39	2·66
		2nd „	1·49	0·62	3·21	1·47	0·98	1·41	1·31	1·00	0 64	0·40	2·05
148A (a)	Repairs and renewals of machinery, tools and plant „	1st half	0·03	0·02	0·18	0·04	0·11	0·07	0·06	0·05	0·03	0·04	0·10
		2nd „	0·01	0·02	0·22	0·03	0·14	0·13	0·07	0·05	0·03	0·04	0·14
149a	Cleaning and oiling . . „	1st half	0·43	0·68	0·55	0·29	0·18	0·39	0·34	0·37	0·31	0·32	0·33
		2nd „	0·32	0·63	0·62	0·32	0·14	0·45	0·36	0·48	0·30	0·35	0·40
150a	Other charges (net) . . „	1st half	...	0·06	0·04	0·05	0·01	0·02	0·33	0·02	0·08	0·01	0·02
		2nd „	...	0·03	0·09	0·05	...	0·01	0·36	...	0·03	0·02	0·06
151a	Total carriage and wagon expenses . . . . „	1st half	3·00	2·07	7·30	5·98	1·30	2·87	3·41	2·51	1·90	2·14	4·30
		2nd „	2·05	2·01	7·25	3·83	1·66	3·61	3·87	2·55	2·06	2·00	4·63
	PER 1,000 VEHICLE-MILE RUN BY HOME VEHICLES.												
146b	General superintendence (including office expenses) . . Rs.	1st half	1·40	0·36	0·97	1·44	0·39	0·60	0·45	0·31	0·28	0·28	0·57
		2nd „	0·67	0·41	1·22	0·98	0·40	0·72	0·56	0·51	0·31	0·31	0·72
147b	Repairs and renewals of coaching vehicles† . . . „	1st half	9·73	3·65	17·65	29·41	1·32	12·25	7·92	4·51	7·72	10·01	10·17
		2nd „	7·10	5·08	15·52	14·48	2·08	13·44	13·15	7·40	8·42	7·68	9·64
148b	Repairs and renewals of goods vehicles† . . . . „	1st half	12·46	2·10	11·50	5·74	2·53	5·98	7·10	4·77	1·98	1·37	6·79
		2nd „	3·26	2·13	14·54	5·27	3·37	7·61	6·60	3·15	2·65	1·69	8·26
148A (b)	Repairs and renewals of machinery, tools and plant . „	1st half	0·13	0·05	0·41	0·11	0·29	0·26	0·20	0·12	0·09	0·09	0·23
		2nd „	0·04	0·05	0·56	0·09	0·34	0 47	0·24	0·13	0·08	0·11	0 33
149b	Cleaning and oiling . . „	1st half	2·03	1·48	1·22	0·91	0·45	1·36	1·01	0·91	0·89	0·78	0·71
		2nd „	0 96	1·59	1·60	0·83	0·35	1·56	1·13	1·12	0·85	0·92	0·95
150b	Other charges (net) . . „	1st half	...	0·12	0·08	0·17	0·02	0·06	0·99	0·04	0·23	0·02	0·05
		2nd „	...	0·06	0·22	0·13	0·02	0·05	1·12	...	0·08	0·04	0·13
151b	Total carriage and wagon expenses . . . . „	1st half	14·16	4·53	16·18	18·88	3·33	9·97	10·03	6·09	5·38	5·17	9·48
		2nd „	6·17	5·06	18·58	9·88	4·12	12·51	12·12	6·00	5·82	5·27	10·96

TABLE B.—LOCOMOTIVE

TABLE C.—CARRIAGE AND

* Converted to the equivalent of Kurhurbaree coal, except in the case of the Nizam's
† These two items are calculated respectively upon the coaching and goods vehicle-mileages,
‡ Including the Cawnpore-Burhwal link.

DIX 18—*continued.*

in Report for 1902.)

***(by systems) during each half-year of 1903*—contd.**

prepared by the railways not shown.

3′ 3⅜″												2′ 6″			Gauge.	
4 (*b*) to (*d*)	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) & (*b*)	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hyderabad-Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western.‡	Bhavnagar-Gondal Junagad-Porbandar.	Burma.	Jodhpur Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai	Calendar year 1903 by half-years.	
EXPENSES—*concld.*																
0·21	0·35	0·39		0·10	0·32	0·27	0·15	0·25	0·22	0·29	0·63	...	0·63	0·99	1st half	138c
0·17	0·41	0·46		0·12	0·42	0·31	0·19	0·29	0·21	0·31	0·68	1·14	0·76	0·95	2nd „	
0·38	0·49	0·50		0·24	0·44	0·34	0·25	0·27	0·49	0·56	0·30	0·60	0·94	1·11	1st half	139c
0·33	0·55	0·52		0·26	0·55	0·35	0·26	0·29	0·50	0·60	0·30	1·51	1·08	1·05	2nd „	
0·65	0·66	0·83		0·52	1·26	1·27	1·49	0·78	1·15	0·83	1·67	0·45	0·54	3·54	1st half	140c
0·65	0·68	0·85		0·50	1·26	1·13	1·44	0·74	1·09	0·91	1·78	1·01	0·62	2·64	2nd „	
0·04	0·09	0·10		0·05	0·06	0·09	0·10	0·04	0·04	0·07	0·18	0·30	0·36	0·40	1st half	141c
0·04	0·10	0·10		0·05	0·08	0·09	0·12	0·05	0·05	0·08	0·16	0·12	0·41	0·51	2nd „	
0·07	0·09	0·08		0·05	0·10	0·10	0·13	0·07	0·07	0·85	0·09	0·32	0·13	0·53	1st half	142c
0·06	0·08	0·08		0·06	0·11	0·11	0·12	0·07	0·07	0·05	0·10	0·03	0·15	0·42	2nd „	
0·31	0·31	0·62		0·23	0·59	0·59	0·48	0·28	0·47	0·76	1·05	...	0·70	1·35	1st half	143c
0·32	0·29	0·66		0·29	0·68	0·82	0·50	0·32	1·06	0·71	1·12	0·55	0·32	0·57	2nd „	
0·06	0·06	0·01		...	0·04	0·04	0·03	0·04	0·04	0·09	0·12	...	0·02	0·05	1st half	143 A( )
0·09	0·09	0·01		0·01	0·05	0·05	0·05	0·06	0·05	0·10	0·08	...	0·01	0·10	2nd „	
0·61	*—0·06*	0·19		0·21	0·08	0·22	0·37	0·13	0·13	0·39	...	...	1·02	0·45	1st half	144c
0·20	0·28	0·25		0·21	*—0·08*	0·18	0·60	0·15	0·18	0·42	...	2·41	1·59	0·99	2nd „	
2·33	1·99	2·72		1·40	2·89	3·42	3·00	1·91	2·62	3·04	4·00	1·67	4·34	8·42	1st half	145c
1·86	2·48	2·93		1·50	3·07	3·51	3·28	1·97	3·21	3·18	4·22	6·77	4·94	7·23	2nd „	
190·55	213·75	219·17		192·11	161·26	211·85	195·94	...	179·81	179·62	173·38	45·32	360·28	441·40	1st half	
177·21	217·53	225·14		183·09	156·75	206·86	206·86	...	217·86	191·39	201·78	604·32	433·11	349·31	2nd „	
...	...	...		...	...	...	...	431·44	...	...	...	...	.....	...	1st half	
...	...	...		...	...	...	...	437·12	...	...	...	...	...	...	2nd „	
WAGON EXPENSES.																
0·28	0·14	0·36		0·12	0·28	0·25	0·13	0·32	0·22	0·27	0·27	...	0·17	0·06	1st half	146a
0·25	0·13	0·42		0·14	0·33	0·28	0·12	0·39	0·20	0·28	0·27	0·35	0·06	0·07	2nd „	
0·79	0·24	0·61		0·28	0·79	0·74	0·42	0·52	0·75	0·89	2·07	...	0·16	0·50	1st half	147a
0·86	0·25	0·78		0·31	0·57	0·87	0·36	0·59	0·49	0·89	2·58	0·35	0·19	0·99	2nd „	
0·79	0·13	0·78		0·37	0·56	0·81	0·42	0·66	1·03	1·36	0·64	...	0·25	0·20	1st half	148a
0·14	0·12	1·20		0·41	0·37	0·89	0·30	0·69	0·77	1·32	0·58	0·35	0·11	1·03	2nd „	
0·03	0·04	0·03		0·02	0·06	0·06	0·02	0·03	0·04	0·04	...	...	...	...	1st half	148 A(a)
0·05	0·05	*·0·01*		0·02	0·07	0·06	0·01	0·06	0·05	0·04	0·01	...	...	...	2nd „	
0·24	0·25	0·23		0·26	0·22	0·29	0·29	0·26	0·25	0·18	0·28	2·36	0·32	0·37	1st half	149a
0·17	0·31	0·22		0·26	0·27	0·30	0·21	0·28	0·25	0·20	0·33	0·57	0·27	0·31	2nd „	
0·07	...	0·01		0·01	0·02	0·04	...	0·01	*—0·03*	0·01	0·02	...	0·01	...	1st half	150a
0·10	...	0·04		0·02	*—0·05*	0·05	...	0·01	*—0·05*	0·02	0·02	...	...	0·01	2nd „	
2·20	0·80	2·02		1·06	1·93	2·19	1·28	1·80	2·26	2·75	3·28	2·36	0·91	1·13	1st half	151a
1·57	0·86	2·67		1·16	1·55	2·45	1·00	2·02	1·71	2·75	3·79	1·62	0·73	2·41	2nd „	
0·74	0·45	1·14		0·29	0·66	0·70	0·38	0·84	0·65	0·78	0·67	...	0·97	0·31	1st half	146b
0·70	0·49	1·05		0·35	0·90	0·82	0·38	1·18	0·62	0·80	0·84	6·01	1·30	0·43	2nd „	
5·41	2·64	3·83		1·94	1·84	5·26	1·21	3·94	4·60	7·43	9·01	...	2·25	4·61	1st half	147b
6·76	2·17	4·38		1·71	2·41	5·60	1·10	3·99	2·99	7·15	11·07	6·17	2·82	12·21	2nd „	
3·39	0·69	4·99		1·29	1·32	3·62	1·21	2·52	6·19	5·86	3·73	...	2·38	2·69	1st half	148b
0·61	0·75	5·40		1·76	2·85	4·53	0·94	3·88	4·76	5·80	6·25	6·17	1·90	14·26	2nd „	
0·09	0·16	0·11		0·04	0·14	0·15	0·06	0·09	0·12	0·12	0·01	...	0·01	...	1st half	148 A(b)
0·14	0·19	0·03		0·06	0·20	0·19	0·04	0·16	0·15	0·10	0·04	...	0·01	...	2nd „	
0·62	0·85	0·72		0·58	0·52	0·80	0·82	0·64	0·76	0·51	0·73	4·68	1·78	2·00	1st half	149b
0·49	1·08	0·55		0·62	0·73	0·84	0·64	0·81	0·75	0·58	1·02	9·91	2·22	2·01	2nd „	
0·17	...	0·03		0·02	0·04	0·10	...	0·02	*—0·08*	0·02	0·06	...	0·06	0·02	1st half	150b
0·26	...	0·09		0·04	*—0·15*	0·13	0·01	0·03	*—0·16*	0·04	0·09	...	0·01	0·09	2nd „	
5·79	2·77	6·40		2·43	4·52	6·00	3·68	4·59	6·85	7·82	14·21	4·68	5·15	6·16	1st half	151b
4·39	3·10	11·50		2·80	4·24	6·99	3·11	6·05	5·23	7·80	19·31	28·26	5·94	15·71	2nd „	

Included with the Assam-Bengal.

Guaranteed State railway, on which the equivalent is in terms of Singareni coal.

all other items in the table being calculated upon the aggregate of both coaching and goods vehicle-mileages.

Appendix 18.
Analysis.

APPEN
(Appendix 46

Analysis of working of each railway

NOTE.—These statistics are not

TABLE D.—TRAFFIC

Serial number.	Particulars.	Gauge.	5′ 6″											
		Number.	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)	8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	3 (g) to (i)
		Calendar year 1903 by half-years.	Bengal-Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	PER TOTAL TRAIN-MILE.												
152a	General superintendence (including office expenses) . . Annas.	1st half	0·96	0·87	1·00	1·60	0·62	0·44	0·73	0·45	0·58	0·62	0·59
		2nd „	0·77	0·89	1·07	1·22	0·67	0·52	0·88	0·56	0·49	0·65	0·69
153a	Station staff . . . . „	1st half	2·75	2·00	3·66	6·25	2·63	1·80	2·14	1·70	2·16	2·30	2·16
		2nd „	3·17	1·99	3·92	5·78	2·73	2·17	2·25	2·08	2·04	2·38	2·50
154a	Train staff . . . . „	1st half	0·52	0·61	0·95	1·09	1·02	1·12	0·66	0·65	0·81	0·72	0·56
		2nd „	0·46	0·68	0·98	0·92	1·13	1·34	0·67	0·72	0·76	0·78	0·62
155a	Fuel, lighting, water and general stores . . „	1st half	0·44	0·46	1·29	1·16	0·48	0·56	0·46	0·44	0·49	0·58	0·76
		2nd „	0·40	0·60	0·93	0·88	0·49	0·69	0·50	0·46	0·49	0·51	0·60
156a	Clothing . . . . „	1st half	...	0·06	0·15	0·09	0·06	0·06	0·10	...	0·04	0·11	0·09
		2nd „	0·06	0·01	0·09	0·07	0·03	0·03	0·04	0·09	0·09	0·07	0·06
157a	Printing, stationery and tickets . . . . „	1st half	0·52	0·34	0·49	0·46	0·26	0·25	0·48	0·21	0·18	0·29	0·29
		2nd „	0·32	0·27	0·50	0·38	0·24	0·35	0·47	0·23	0·19	0·26	0·32
158a	Charges for delivery and collection of goods, etc. . „	1st half	...	0·01	...	0·02	0·01	0·01	0·03	...	...	0·01	...
		2nd „	...	0·01	...	0·05	0·01	0·01	0·01	0·01	...	0·01	...
159a	Miscellaneous expenses . „	1st half	0·03	0·02	0·02	0·11	0·03	0·02	0·05	0·01	...	...	0·01
		2nd „	0·02	0·01	0·02	0·04	...	0·02	0·06	0·02	...	...	0·01
160a	Payments to other lines . „	1st half	0·21	0·56	0·08	0·01	0·07	0·09	0·04	0·35	0·05	0·27	0·05
		2nd „	0·18	0·64	0·45	...	0·07	0·14	0·05	0·48	0·03	0·19	0·28
161a	Other charges (net) . . „	1st half	...	0·02	0·01	0·01	0·01	0·01	0·05	...	0·05	0·02	...
		2nd „	...	0·01	0·03	0·01	0·02	0·02	0·08	...	0·03	0·01	0·02
162a	Total traffic expenses . „	1st half	5·43	4·95	7·65	10·30	5·25	4·35	4·75	3·81	4·36	4·92	4·51
		2nd „	5·38	5·11	7·99	9·35	5·39	5·36	4·97	4·65	4·12	4·86	5·10
	PER CENT. ON TRAFFIC EARNINGS. *(Abstracts H and I of Revenue Accounts.)*												
152b	General superintendence (including office expenses) . *per cent.*	1st half	2·32	1·57	0·91	2·64	0·88	0·68	1·22	0·61	1·01	1·20	0·90
		2nd „	1·47	1·87	1·20	1·53	0·94	0·99	1·49	0·84	0·88	1·58	1·21
153b	Station staff . . . . „	1st half	6·64	3·60	3·31	10·31	3·74	2·79	3·55	2·26	3·78	4·41	3·28
		2nd „	6·04	4·17	4·36	7·21	3·88	4·01	4·06	3·12	3·70	5·76	4·41
154b	Train staff . . . . „	1st half	1·25	1·10	0·86	1·80	1·54	1·73	1·10	0·86	1·43	1·39	0·85
		2nd „	0·88	1·42	1·09	1·15	1·61	2·49	1·21	1·09	1·38	1·89	1·10
155b	Fuel, lighting, water and general stores . . „	1st half	1·06	0·84	1·16	1·91	0·68	0·87	0·78	0·57	0·86	1·11	1·16
		2nd „	0·76	1·25	1·04	1·09	0·70	1·28	0·91	0·69	0·89	1·23	1·05
156b	Clothing . . . . „	1st half	...	0·10	0·14	0·15	0·09	0·09	0·16	...	0·07	0·20	0·14
		2nd „	0·12	0·03	0·10	0·09	0·06	0·14	0·07	0·13	0·16	0·17	0·10
157b	Printing, stationery and tickets . . . . „	1st half	1·27	0·61	0·44	0·76	0·37	0·39	0·80	0·27	0·32	0·57	0·44
		2nd „	0·62	0·56	0·56	0·47	0·34	0·65	0·84	0·34	0·35	0·63	0·56
158b	Charges for delivery and collection of goods, etc. „	1st half	...	0·02	...	0·03	0·01	0·02	0·04	...	...	0·02	...
		2nd „	...	0·02	...	0·07	0·01	0·02	0·02	0·01	...	0·03	...
159b	Miscellaneous expenses . „	1st half	0·06	0·03	0·02	0·18	0·04	0·02	0·07	0·01	0·01	...	0·02
		2nd „	0·03	0·03	0·02	0·04	...	0·03	0·10	0·03	...	...	0·03
160b	Payments to other lines . „	1st half	0·51	1·01	0·07	0·01	0·10	0·15	0·07	0·46	0·08	0·51	0·07
		2nd „	0·34	1·33	0·50	...	0·10	0·26	0·09	0·71	0·05	0·46	0·50
161b	Other charges (net) . „	1st half	...	0·04	0·01	0·02	0·02	0·02	0·09	...	0·08	0·05	0·01
		2nd „	...	0·02	0·03	0·02	0·02	0·03	0·15	0·01	0·05	0·02	0·03
162b	Total traffic expenses . „	1st hal	13·11	8·92	6·92	17·81	7·47	6·75	7·88	5·04	7·64	9·46	6·87
		2nd „	10·26	10·70	8·90	11·67	7·66	9·92	8·96	6·97	7·46	11·77	8·99
	General superintendence per cent. on traffic earnings (including steamboat) . . . . *Per cent.*	1st half	2·32	1·57	0·91	2·64	0·87	0·68	1·22	0·61	1·01	1·20	0·90
		2nd „	1·47	1·87	1·20	1·53	0·94	0·99	1·49	0·84	0·88	1·58	1·21

DIX 18—*continued.*

in Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3′ 3¾″												2′ 6″			Gauge.	
4 (*b*) to (*d*)	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*) to (*c*)	14 (*a*) to (*d*)	15 (*a*)	18 (*a*) to (*c*)	19 (*a*) & (*b*)	20 (*a*) to (*c*)	21 (*a*) to (*h*)	22 (*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hyderabad Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western.*	Bhavnagar-Gondal-Junagad-Porbander.	Burma.	Jodhpur-Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
EXPENSES.																
0·96	0·64	1·14		0·57	0·88	0·74	0·51	0·81	0·65	0·66	2·20	...	0·02	0·54	1st half	152a
0·87	0·72	1·32		0·67	1·57	0·81	0·52	0·84	0·63	0·71	1·95	0·05	...	0·47	2nd ,,	
2·66	1·62	2·51		1·47	2·76	2·16	1·26	1·49	1·78	1·71	2·07	9·88	1·14	1·27	1st half	153a
2·58	1·89	3·72		1·67	2·67	2·34	1·14	1·52	1·79	1·71	1·99	4·05	1·07	1·32	2nd ,,	
0·67	0·64	0·64		0·43	0·44	0·61	0·22	0·38	0·43	0·60	0·25	1·94	0·44	0·49	1st half	154a
0·62	0·70	0·65		0·46	0·47	0·69	0·22	0·39	0·42	0·60	0·21	1·39	0·35	0·49	2nd ,,	
0·56	0·47	0·57		0·37	0·79	0·70	0·36	0·40	0·33	0·39	0·55	0·12	...	0·49	1st half	155a
0·51	0·60	0·70		0·43	0·51	0·59	0·34	0·41	0·37	0·37	0·35	...	...	0·50	2nd ,,	
0·04	0·01	0·05		0·10	0·02	0·08	0·02	0·03	0·10	0·09	0·05	...	...	0·04	1st half	156a
0·05	0·08	0·06		0·04	0·01	0·08	0·03	0·03	0·01	0·06	0·19	...	...	0·01	2nd ,,	
0·32	0·21	0·21		0·20	0·47	0·35	0·32	0·37	0·24	0·28	0·36	...	0·01	0·17	1st half	157a
0·23	0·25	0·27		0·22	0·49	0·42	0·29	0·26	0·15	0·28	0·37	0·08	0·01	0·19	2nd ,,	
...	...	...		0·13	...	...	...	...	...	...	...	...	...	...	1st half	158a
...	...	...		0·11	...	0·01	...	...	...	...	...	...	...	...	2nd ,,	
0·01	0·01	0·01		0·03	0·03	0·02	0·01	0·04	0·01	0·04	...	...	...	...	1st half	159a
0·02	0·02	0·02		0·05	0·03	0·02	...	0·04	0·01	0·03	0·03	...	...	...	2nd ,,	
...	0·29	...		0·08	0·23	...	0·02	0·23	0·08	0·21	0·35	...	...	...	1st half	160a
...	0·35	...		0·09	0·28	...	0·02	0·30	0·07	0·24	0·31	...	...	...	2nd ,,	
0·07	0·01	0·01		0·09	0·02	0·03	...	0·01	...	0·02	...	...	...	0·04	1st half	161a
0·10	...	...		0·10	—0·12	0·03	...	0·02	...	0·03	...	...	...	0·03	2nd ,,	
5·29	3·90	5·16	Included with the Assam-Bengal.	3·47	5·64	4·69	2·72	3·76	3·62	4·00	5·83	11·94	1·61	3·04	1st half	162a
4·98	4·61	6·74		3·64	5·93	4·99	2·56	3·81	3·45	4·03	5·40	5·57	1·43	3·01	2nd ,,	
2·08	1·38	3·11		1·30	1·38	1·37	1·10	1·67	1·22	1·50	3·65	...	0·09	3·36	1st half	152b
1·56	2·05	2·75		1·61	2·89	1·90	1·35	2·05	1·23	1·76	4·08	0·28	...	3·22	2nd ,,	
5·76	3·49	6·88		3·36	4·35	4·03	2·45	3·09	3·32	3·87	3·42	7·48	4·88	7·90	1st half	153b
4·67	5·43	7·74		4·04	4·90	5·21	2·97	3·72	3·47	4·28	4·19	23·13	7·19	9·09	2nd ,,	
1·45	1·38	1·75		0·98	0·69	1·13	0·44	0·79	0·80	1·35	0·42	1·47	1·87	3·04	1st half	154b
1·11	2·02	1·34		1·10	0·86	1·53	0·58	0·95	0·82	1·50	0·44	7·22	2·36	3·36	2nd ,,	
1·22	1·03	1·62		0·85	1·24	1·30	0·70	0·82	0·61	0·89	0·91	0·69	0·01	3·07	1st half	155b
0·92	1·73	1·45		1·05	0·94	1·30	0·88	1·01	0·72	0·92	0·74	...	...	3·44	2nd ,,	
0·09	0·01	0·15		0·22	0·03	0·15	0·02	0·06	0·18	0·20	0·09	...	...	0·23	1st half	156b
0·09	0·22	0·12		0·10	0·01	0·18	0·09	0·08	0·02	0·15	0·41	...	...	0·06	2nd ,,	
0·69	0·45	0·57		0·46	0·75	0·65	0·63	0·77	0·44	0·63	0·59	...	0·04	1·08	1st half	157b
0·42	0·72	0·56		0·53	0·90	0·93	0·77	0·64	0·29	0·79	0·79	0·44	0·04	1·32	2nd ,,	
...	...	...		0·30	...	...	...	...	...	...	...	...	...	...	1st half	158b
...	...	...		0·26	...	0·01	...	...	...	...	...	...	...	...	2nd ,,	
0·01	0·04	0·04		0·07	0·04	0·04	0·02	0·08	0·03	0·09	...	...	...	0·03	1st half	159b
0·03	0·05	0·04		0·12	0·06	0·05	...	0·09	0·02	0·07	0·07	...	...	0·01	2nd ,,	
...	0·63	...		0·19	0·37	...	0·05	0·48	0·15	0·43	0·38	...	...	...	1st half	160b
...	0·99	...		0·28	0·52	...	0·06	0·74	0·14	0·61	0·85	...	...	...	2nd ,,	
0·16	...	0·01		0·18	0·03	0·06	0·01	0·03	...	0·04	...	...	...	0·23	1st half	161b
0·17	0·01	0·01		0·23	—0·22	0·07	...	0·05	0·01	0·08	...	...	...	0·18	2nd ,,	
11·46	8·41	14·13		7·91	8·88	8·73	5·32	7·79	6·75	9·05	9·66	9·04	6·89	18·94	1st half	162b
8·97	13·22	14·01		9·27	10·90	11·08	6·70	9·38	6·72	10·07	11·37	31·77	9·59	20·68	2nd ,,	
1·94	1·38	3·11		1·21	1·38	1·37	1·10	1·67	1·22	1·50	3·65	...	0·09	3·36	1st half	
1·43	2·05	2·75		1·50	2·89	1·90	1·35	2·05	1·23	1·76	4·08	0·28	...	3·22	2nd ,,	

* Including the Cawnpore-Burhwal link.

Appendix 18.
Analysis.

APPEN

(Appendix 46-

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*e*)	7 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*e*)	10 (*a*) & (*b*)	3 (*g*) to (*l*)
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	PER TOTAL TRAIN-MILE.												TABLE E.—GENERAL
163*a*	Home expenditure . . *Annas*	1st half	1·58	1·00	0·31	0·19	*0·39	0·33	0·35	0·47	0·09	0·14	0·18
		2nd „	1·14	1·02	0·33	...	*0·40	0·44	0·40	0·71	...	...	0·21
164*a*	Agent's office—salaries and expenses . . . . „	1st half	1·20	0·32	0·27	0·36	0·12	0·14	0·37	0·24	0·15	0·22	0·16
		2nd „	0·87	0·32	0·25	0·31	0·18	0·17	0·39	0·30	0·14	0·24	0·16
165*a*	Audit, accounts and pay office „	1st half	1·33	0·81	1·07	0·83	0·43	0·47	0·71	0·97	0·49	0·62	0·63
		2nd „	1·04	0·84	1·14	0·68	0·46	0·60	0·82	1·16	0·43	0·63	0·73
166*a*	Stores Department . . „	1st half	0·19	0·18	0·41	0·13	0·15	0·14	0·10	0·19	0·13	0 15	0·25
		2nd „	0·14	0·18	0·45	0·12	0·16	0·17	0·11	0·24	0·11	0·16	0·29
167*a*	Medical „ . . . „	1st half	0·18	0·21	0·24	0·20	0·14	0·09	0·13	0·14	0·11	0·10	0·14
		2nd „	0·14	0·21	0·26	0·18	0·15	0·11	0·15	0·23	0·10	0·11	0·17
168*a*	Rents and miscellaneous . „	1st half	0·74	0·34	0·40	0·29	0·20	0·12	0·16	0·24	0·15	0·19	0·24
		2nd „	0·51	0·32	0·40	3·21	0·18	0·16	0·19	0·35	0·14	0·26	0·26
169*a*	Police . . . . . „	1st half	0·40	0·16	0·56	0·18	0·23	0 19	0·29	0·50	0·13	0·16	0·33
		2nd „	0·31	0·20	0·53	0·16	0·22	0·23	0·31	0·62	0·12	0·16	0·34
170*a*	Advertising . . . . „	1st half	0 05	0·02	0·01	0·02	...	0·01	0·02	...	0·01	...	0·01
		2nd „	0·02	0·03	0·01	0·02	0·01	0·01	0·02	0·01	0·01	0·01	0·01
171*a*	Electric telegraph „	1st half	0·99	0·95	1·30	0·89	0·69	0·54	0·79	0·52	0·69	0·66	0·76
		2nd „	0·75	0·99	1·40	0·78	0·74	0·71	0·85	0·63	0·62	0·71	0·89
172*a*	Other charges (net) . . „	1st half	...	....	0·02	...	...	0·01	0·14	...	0·01	...	0 01
		2nd „	...	...	0·01	0·01	0·01	0·01	0·17	0·01	...	...	...
173*a*	Total general charges . „	1st half	6·66	3·99	4·59	3·09	2·35	2 03	3·06	3·27	1·96	2·24	2·71
		2nd „	4·92	4·11	4·78	2·47	2·46	2·61	3·41	4·26	1·67	2·28	3·06
	PER CENT. ON TOTAL EARNINGS.												
163*b*	Home expenditure . . Per cent.	1st half	3·16	1·72	0·27	0·34	*0·55	0·51	0·57	0·60	0·15	0·24	0·27
		2nd „	2·14	2·03	0·35	...	*0·56	0·81	0·69	0·99	...	...	0·36
164*b*	Agent's office—salaries and expenses . . „	1st half	2·41	0·56	0·24	0 63	0·17	0·21	0·59	0·31	0·25	0·39	0·24
		2nd „	1·64	0·64	0·28	0·43	0·18	0·31	0·68	0·42	0·25	0·53	0·28
165*b*	Audit, accounts and pay office . . . . „	1st half	2·67	1·39	0·94	1·45	0·60	0·72	1·13	1·24	0·85	1·08	0·94
		2nd „	1·96	1·67	1·24	0·94	0·64	1·09	1·43	1·66	0·76	1·38	1·24
166*b*	Stores Department . „	1st half	0·38	0·30	0·36	0·22	0·20	0·21	0·16	0·25	0·23	0·25	0·37
		2nd „	0·26	0·36	0·49	0·16	0·22	0·32	0·19	0·33	0·19	0·35	0·49
167*b*	Medical „ . „	1st half	0·36	0·36	0·21	0·34	0·19	0·14	0·20	0·18	0·20	0·17	0·21
		2nd „	0·27	0·43	0·29	0·24	0·21	0·21	0·26	0·32	0·18	0·23	0·29
168*b*	Rents and miscellaneous „	1st half	1·48	0·57	0·36	0·51	0·23	0·19	0·26	0·31	0·26	0·33	0·35
		2nd „	0·95	0·63	0·43	2·29	0·25	0·29	0·32	0·51	0·26	0·57	0·43
169*b*	Police . . . . „	1st half	0·81	0·27	0·49	0·31	0·32	0 29	0·46	0·65	0·23	0·27	0·49
		2nd „	0·58	0·40	0·57	0·23	0·31	0·42	0·54	0·88	0·22	0·35	0·57
170*b*	Advertising . . . „	1st half	0·09	0·03	0·01	0·04	0·01	0·02	0·04	...	0·01	0·02	0·01
		2nd „	0·04	0·06	0·01	0·03	0·02	0·01	0·04	0·02	0·01	0·04	0·01
171*b*	Electric telegraph . „	1st half	1·98	1·64	1·14	1·56	0·96	0·83	1·27	0·67	1·18	1·13	1·14
		2nd „	1·40	1·97	1·52	1·08	1·03	1·29	1·49	0·90	1·11	1·57	1·53
172*b*	Other charges (net) . „	1st half	...	...	0·02	...	0·01	0·02	0·28	...	0·02	...	0·02
		2nd „	...	...	0·01	0·02	0·01	0·01	0·30	...	0·01	...	0·01
173*b*	Total general charges . „	1st half	13·34	6·84	4·04	5·40	3·29	3·12	4·91	4·21	3·38	3·88	4·04
		2nd „	9·24	8·19	5·19	3·42	3·42	4·78	5·94	6·03	2·99	5·02	5·21
	PER CENT. ON GROSS EARNINGS.												TABLE G.—SPECIAL AND MISCEL
174	Law charges . . . Per cent.	1st half	0·29	0·02	0·02	0 04	0·02	0·01	0·02	0·01	...	...	0·02
		2nd „	0·06	0·02	0·02	0·02	0·02	0·01	0·04	0·01	...	...	0·02
175	Compensation . . „	1st half	0·04	0·07	0·10	0·51	0 18	0·07	0·02	0·01	0·16	0·09	0·10
		2nd „	0·36	0·04	0·17	0·12	0·12	0·47	0·01	0·03	0·06	0·21	0·17
176	Rates and taxes . „	1st half	0·34	0·33	0·12	0·23	0 13	0 09	0·07	0·01	0·10	0·05	0·12
		2nd „	0·25	0·15	0·16	0·15	0·14	0·15	0·10	...	0·09	0·03	0·17
177	Payments to other lines „	1st half	4·49	1·35	0·43	0·39	1·00	1·56	0·16	0·36	0·23	0·75	0·19
		2nd „	12·13	3·19	0·14	1·02	0·94	1·23	0 23	0·56	0·16	1·63	0·14
178	Other charges (net) . „	1st half	0·94	1·91	0·50	1·28	0·24	0·85	1·14	...	0·82	0·85	0·51
		2nd „	0·89	1·07	0·70	0·79	0·27	1·57	1·25	1·86	0·83	1·04	0·72
179	Total special and miscellaneous expenses . „	1st half	6·10	3·68	1·17	2·45	1·57	2 59	1 44	2·22	1·31	1·74	0·94
		2nd „	13·69	5·07	1·19	† 2·10	1·49	3·44	1·61	2·46	1·14	2·91	1·22

* Including cost of Government controlling establishment.
† Including the Cawnpore-Burhwal link.

DIX 18—*continued.*

in Report for 1902.)

(by systems) during each half-year of 1903—contd.

prepared by the railways not shown.

3′ 3½″												2′ 6″			Gauge.	
4 (b) & (d)	8 (c)	11 (a)	11 (b)	12 (a) to (c)	14 (a) to (d)	15 (a)	18 (a) to (c)	19 (a) & (b)	20 (a) to (e)	21 (a) to (h)	22 (a)	2 (b)	2 (d)	9 (f) & (g)	Number.	Serial number.
Eastern Bengal.	Hyderabad-Godavari Valley.	Assam-Bengal.	Noakhali (Bengal).	Bengal and North-Western.†	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Jodhpur Bikaner.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Raipur-Dhamtari.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
CHARGES.																
	0·65	1·76		0·45	0·14	0·77	...	0·96	0·79	0·83	...	46·29	1·32	0·05	1st half	163a
	0·90	1·81		0·54	0·17	0·78	...	1·12	0·77	0·90	...	7·19	1·19	...	2nd ,,	
	0·33	0·91		0·15	0·70	0·25	0·14	0·38	0·22	0·25	1·91	...	...	0·48	1st half	164a
	0·38	1·12		0·23	0·86	0·28	0·12	0·42	0·25	0·42	1·69	...	...	0·14	2nd ,,	
	1·31	1·80		0·63	1·47	0·64	0·67	1·02	0·76	0·77	1·01	...	...	0·48	1st half	165a
	1·49	2·12		0·76	1·79	0·67	0·64	1·09	0·72	0·82	0·84	...	...	0·43	2nd ,,	
	0·27	0·63		0·09	0·35	0·18	0·11	0·28	0·18	0·20	0·11	...	...	0·12	1st half	166a
	0·30	0·79		0·11	0·40	0·19	0·11	0·31	0·18	0·20	0·12	...	...	0·11	2nd ,,	
	0·30	0·47		0·09	0·45	0·16	0·09	0·10	0·18	0·15	0·26	...	...	0·04	1st half	167a
	0·39	0·56		0·11	0·50	0·17	0·13	0·12	0·17	0·17	0·26	...	...	0·11	2nd ,,	
	0·19	0·20		0·13	0·38	0·15	0·12	0·34	0·14	0·16	0·39	...	0·18	0·12	1st half	168a
	0·41	0·17		0·13	0·34	0·17	0·10	0·37	0·15	0·16	0·22	...	0·10	0·14	2nd ,,	
	0·54	0·31		0·18	1·00	0·42	0·09	0·34	0·25	0·72	...	...	0·05	0·45	1st half	169a
	0·62	0·31		0·22	1·19	0·41	0·09	0·39	0·22	0·45	...	0·03	0·04	0·38	2nd ,,	
	...	0·01		0·01	...	0·03	...	0·02	...	0·01	...	...	....	0·01	1st half	170a
	0·04	0·02		0·01	0·02	0·04	...	0·03	0·01	0·01	...	...	...	...	2nd ,,	
	0·67	1·81		0·55	1·23	0·69	0·69	0·71	0·60	0·95	1·02	...	0·62	0·82	1st half	171a
	0·78	1·64		0·65	1·40	0·71	0·87	0·78	0·59	1·01	0·98	2·41	0·55	0·58	2nd ,,	
	0·05	...		...	...	...	...	...	0·01	0·01	...	7·24	...	0·01	1st half	172a
	...	...		...	−0·20	...	...	...	...	0·01	...	...	...	...	2nd ,,	
	4·31	7·40		2·28	5·72	3·29	2·11	4·15	3·13	4·05	4·70	53·53	2·12	2·25	1st half	173a
	5·31	8·54		2·76	6·48	3·42	2·06	4·63	3·06	4·15	4·11	9·63	1·88	1·89	2nd ,,	
Included with the 5′ 6″ gauge.			Included with the Assam-Bengal.													
	1·34	4·49		0·98	0·22	1·40	...	1·90	1·43	1·85	...	13·53	5·27	0·33	1st half	163b
	2·48	3·42		1·18	0·31	1·69	...	2·66	1·46	2·21	...	...	...	...	2nd ,,	
	0·70	2·32		0·30	1·09	0·46	0·28	0·75	0·40	0·56	3·12	...	...	0·89	1st half	164b
	1·05	2·12		0·51	1·55	0·62	0·32	1·00	0·47	1·03	3·48	...	...	0·93	2nd ,,	
	2·72	4·62		1·30	2·29	1·18	1·27	2·03	1·38	1·73	1·66	...	...	2·96	1st half	165b
	4·10	4·01		1·66	3·22	1·46	1·62	2·58	1·36	2·00	1·72	...	...	2·89	2nd ,,	
	0·55	1·62		0·19	0·53	0·24	0·21	0·56	0·33	0·44	0·18	...	...	0·74	1st half	166b
	0·82	1·50		0·23	0·72	0·42	0·29	0·73	0·34	0·50	0·23	...	...	0·74	2nd ,,	
	0·63	1·21		0·20	0·70	0·29	0·17	0·20	0·33	0·34	0·42	...	...	0·26	1st half	167b
	1·08	1·06		0·24	0·91	0·36	0·32	0·29	0·32	0·42	0·53	...	...	0·73	2nd ,,	
	0·40	0·52		0·27	0·58	0·26	0·22	0·70	0·25	0·36	0·64	...	0·52	0·77	1st half	168b
	1·14	0·32		0·29	0·60	0·38	0·24	0·85	0·28	0·39	0·46	...	0·61	0·97	2nd ,,	
	1·13	0·78		0·33	1·56	0·76	0·18	0·69	0·45	1·60	...	...	0·18	2·76	1st half	169b
	1·70	0·59		0·48	2·13	0·88	0·23	0·93	0·42	1·09	...	0·05	0·24	2·59	2nd ,,	
	...	0·03		0·01	...	0·06	...	0·02	0·01	0·02	...	...	...	0·05	1st half	170b
	0·10	0·04		0·02	0·03	0·09	0·01	0·06	0·02	0·03	...	...	...	0·03	2nd ,,	
	1·40	3·35		1·14	1·90	1·26	1·69	1·41	1·03	2·12	1·62	2·11	2·45	5·05	1st half	171b
	2·13	3·10		1·41	2·52	1·53	2·20	1·85	1·10	2·49	2·01	4·43	3·18	3·90	2nd ,,	
	0·10	...		...	...	0·01	...	...	0·08	0·02	...	...	...	0·08	1st half	172b
	−0·02	...		...	−0·37	...	...	...	...	0·02	...	...	...	0·02	2nd ,,	
	8·97	18·94		4·72	8·87	6·02	4·02	8·26	5·69	9·04	7·73	15·64	8·42	13·89	1st half	173b
	14·58	16·16		6·02	11·63	7·43	5·23	10·95	5·77	10·18	8·43	17·70	10·93	12·80	2nd ,,	
LANEOUS EXPENSES.																
	0·02	0·04		0·07	0·02	0·04	...	0·03	0·01	0·03	...	...	...	...	1st half	174
	0·03	0·06		0·06	0·02	0·06	...	0·22	...	0·08	...	...	...	...	2nd ,,	
	0·01	0·16		0·03	0·01	0·05	0·60	0·07	0·03	0·03	0·01	...	0·01	0·30	1st half	175
	0·02	0·08		0·10	0·01	0·04	0·02	0·12	0·02	0·14	...	...	...	0·02	2nd ,,	
	0·01	0·23		0·04	...	0·02	...	0·01	0·19	0·16	...	...	...	...	1st half	176
	...	0·16		0·05	...	0·43	...	0·02	0·22	0·08	...	...	...	...	2nd ,,	
	0·19	0·18		0·65	0·12	...	1·72	...	0·18	0·07	1·19	...	...	...	1st half	177
	0·28	0·04		0·41	0·20	...	1·97	...	0·16	0·22	...	...	...	...	2nd ,,	
	1·03	3·57		1·04	0·93	1·00	0·44	0·45	0·52	1·11	0·39	0·07	0·81	2·80	1st half	178
	1·79	3·97		1·46	1·09	1·29	0·51	1·34	0·53	1·49	1·39	0·53	0·89	2·78	2nd ,,	
	1·26	4·18		1·83	1·08	1·11	2·76	0·56	0·88	1·40	1·59	0·07	0·82	3·10	1st half	179
	2·12	4·31		2·68	1·32	1·82	2·50	1·70	0·93	2·01	1·39	0·53	0·89	2·80	2nd ,,	

Appendix 18.
Analysis.

APPEN
(Appendix 46

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*e*)	7 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*e*)	10 (*a*) & (*b*)	3 (*g*) to (*l*)
		Calendar year 1903 by half-years.	Bengal Central.	Bengal-Nagpur	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Rajputana-Malwa.
	FROM APPENDIX I.												
180	Average number of locomotives on the line. . . No	1st half	25	199	187	127	869	777	249	56	670	182	434
		2nd ,,	27	210	211	128	900	798	249	59	673	189	432
181	Average miles run per locomotive *per diem* . . *Miles*	1st half	52·54	71·82	54·54	53·83	68·29	68·08	61·44	63·37	65·96	78·80	45·35
		2nd ,,	68·88	68·62	41·70	68·56	59·17	52·07	62·03	52·88	71·00	73·48	40·59
	lbs. coal per engine-mile (coal burning engines)—												
182	Coaching . . . *lbs.*	1st half			45·69					45·84			
		2nd ,,			44·59					35·28			
183	Goods . . . . . ,,	1st half	39·54	51·82	46·29	49·58	52·78	49·00	48·55	53·96	43·32	43·05	32·95
		2nd ,,	42·19	51·00	46·38	50·69	51·10	47·00	48·77	51·68	43·05	41·52	30·81
184	Mixed . . . . . ,,	1st half			43·85					54·33			
		2nd ,,			44·64					49·74			
	lbs. wood per engine-mile (wood burning engines)—												
185	Coaching . . . *lbs.*	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
186	Goods . . . . . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
187	Mixed . . . . . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
	Average gross weight of trains—												
188	Coaching . . . *Tons*	1st half	114·77	266·77	166·34	163·26	178·53	155·12	151·15	138·61	208·56	187·32	104·83
		2nd ,,	141·33	189·51	157·73	183·46	216·05	159·79	151·81	142·61	202·84	184·56	106·35
189	Goods . . . . . ,,	1st half	150·07	397·92	580·05	349·55	465·87	355·07	370·59	364·47	314·62	354·86	251·45
		2nd ,,	153·11	268·52	554·80	494·38	509·63	347·14	326·15	329·91	346·56	311·77	251·27
190	Mixed . . . . . ,,	1st half	98·24	319·75	223·95	214·51	244·48	...	282·18	309·95	247·59	240·36	142 24
		2nd ,,	376·89	361·14	269·47	220·81	234·84	...	271·26	300·90	252·52	210·26	134·09
	Average through speed of trains—												
191	Coaching . *Miles per hour*	1st half	20	25·73	20·44	19·07	20·30	27·26	21·20	22·86	23·43	28·22	19·49
		2nd ,,	20	25·73	22·85	19·07	20·30	27·26	21·19	22·86	26·04	29·66	17·61
192	Goods . . . ,,	1st half	14	10·53	10·23	15·00	*12·00	13·34	11·59	10·36	12·10	12·41	9·33
		2nd ,,	14	10·53	10·50	15·00	*12·00	13·34	12·28	10·30	11·86	12·56	10·46
193	Mixed . . ,,	1st half	15	17·31	14·44	14·30	17·40	13·11	10·52	14·22	16·46	17·77	14·23
		2nd ,,	15	17·31	15·31	14·30	17·40	13·11	10·45	14·22	13·62	19·49	14·26
	FROM APPENDIX II.												
194	Average mileage *per diem* of coaching vehicles, including brakes . . . *Miles*	1st half	10,193	96,750	78,197	45,916	276,107	237,951	89,169	15,993	283,097	97,083	157,261
		2nd ,,	9,724	88,425	78,089	44,706	265,053	241,420	89,280	15,939	297,650	103,906	161,671
195	Goods ditto ditto ,,	1st half	4,541	187,175	151,554	57,938	906,945	774,205	181,308	59,899	569,953	156,125	322,667
		2nd ,,	19,687	155,440	98,481	114,411	873,708	497,655	163,681	39,305	633,038	179,500	227,288
	FROM APPENDIX V.												
	Average age of sleepers—												
196	Wood . . . . . *Years*	1st half	12·58	5·25	‖ 8·71	8·50	11·05	...	¶3·69	...	8·46	10·70	7·50
		2nd ,,	12 61	5·43	‖ 8·92	8·50	11·18	...	¶4·11	...	7·01	10·93	7·50
197	Iron . . . . . ,,	1st half	...	‡ 8·72	‖ 13·29	9·50	† 10·06	...	¶30·36	....	14·15	15·96	‡ 16·50
		2nd ,,	...	‡ 9·21	‖ 11·88	10·00	† 10·25	...	¶30·68	....	10·36	15·68	‡ 17·00
	Percentage of removals—												
198	Wood . . . . *Per cent.*	1st half	5·99	3·82	‖ 2·43	4·29	3·45	§ 3·52	¶1·82	...	3·48	0·22	5·40
		2nd ,,	3·69	13·65	‖ 2·94	2·97	2·98	§ 3·97	¶1·60	**2·56	0·69	0·20	4·75
99	Iron . . . . ,,	1st half	...	‡ 0·09	‖ 0·62	0·07	† 1·90	§ 0·72	¶0·26	...	1·99	3·29	‡ 0·47
		2nd ,,	...	‡ 7·52	‖ 0·64	0·37	† 1·26	§ 0·57	¶0·26	...	1·64	5·44	‡ 1·54

* The through speed of express goods trains is 17·00 miles per hour.
† Denham Olpherts' sleepers only. ‡ Total iron and steel sleepers.
‖ Bombay, Baroda and Central India railway only.
§ Great Indian Peninsula railway only.
¶ Excludes the Madras (North-East line).
** Nizam's Guaranteed State railway only.

DIX 18—*concluded.*
in Report for 1902.)

***(by systems) during each half-year of 1903*—concld.**

AS APPENDICES TO THE ANALYSIS.

prepared by the railways not shown.

3′ 3⅜″												2′ 6″			Gauge.	
4 (*b*) to (*d*)	8 (*c*)	11 (*a*)	11 (*b*)	12 (*a*)to(*c*)	14 (*a*)to(*d*)	15 (*a*)	18(*a*) to (*c*)	19 (*a*) & (*b*)	20 (*a*)to(*e*)	21 (*a*)to (*h*)	22(*a*)	2 (*b*)	2 (*d*)	9 (*f*) & (*g*)	Number.	Serial number.
Eastern Bengal.	Hydera-bad-Go-davari Valley.	Assam-Bengal.	Noa-khali (Ben-gal).	Bengal and North-Western.	Bhavna-gar-Gon dal-Ju-nagad-Porban-dar.	Burma.	Jodh-pur-Bika-ner.	Rohil-kund and Ku-maon.	South Indian.	South-ern Mah-ratta.	Udai-pur-Chitor.	Jubbul-pore-Gondia exten-sion.	Raipur-Dhan-tari.	Khushal-garh-Kohat-Thal and Nowshera-Durgai.	Calendar year 1903 by half-years.	
120	50	41		213	30	236	44	37	197	228	3	1	4	27	1st half	180
131	50	55		221	29	236	48	38	213	223	3	9	4	25	2nd „	
65·93	54·12	67·55		71·20	57·35	63·27	63·86	60·53	57·81	49·63	63·26	13·92	38·15	21·16	1st half	181
64·60	47·54	47·69		57·72	48·54	58·89	57·04	58·78	54·76	46·68	50·22	4·49	41·37	39·38	2nd „	
														...	1st half	182
														...	2nd „	
35·73	36·12	34·40		34·23	28·06	34·58	38·90	...	30·03	31.23	31·57	18·98	24·44	...	1st half	183
35·54	34·37	32·97		31·39	25·99	34·68	35·67	...	30·21	31·78	32·32	54·47	23·06	...	2nd „	
														...	1st half	184
														...	2nd „	
...	...	...		...	...	...	...		...	...	...	...	...		1st half	185
...	...	...		...	...	...	...		...	...	...	...	...		2nd „	
...	...	...		...	...	...	...	64·84	...	...	...	...	...	22·27	1st half	186
...	...	...		...	...	...	...	61·14	...	...	...	...	...	16·94	2nd „	
...	...	...		...	...	...	...		...	...	...	...	...		1st half	187
...	...	...		...	...	...	...		...	...	...	...	...		2nd „	
116·00	134·48	94·21		155·20	72·71	124·13	74·97		84·25	93·01	...	...	...	38·42	1st half	188
108·33	130·16	83·28		148·96	71·32	137·21	111·14	§	86·88	97·01	...	...	...	28·21	2nd „	
218·39	175·00	75·83		186·46	172·82	171·01	183·83		156·45	278·46	...	...	...	22·52	1st half	189
232·90	141·25	175·07		178·51	185·59	162·14	169·59	§	146·33	267·31	...	63·65	20·78	21·80	2nd „	
139·02	138·53	146·01		169·71	159·34	173·52	121·02		165·44	212·21	149·86	...	36·57	47·04	1st half	190
148·02	131·27	194·69		158·67	144·21	175·92	113·56	§	169·30	211·99	131·23	...	39·74	46·39	2nd „	
19·28	...	...		17·00	20·53	19·13	...	...	18·09	16·28	...	...	...	...	1st half	191
19·28	...	...		17·00	20·53	19·14	...	...	18·00	16·28	...	...	...	...	2nd „	
11·16	10·70	...		9·50	10·96	10·79	30·62	9·95	9·50	7·42	...	...	...	8·54	1st half	192
11·16	10·70	...		9·50	10·96	10·79	9·93	9·93	9·50	7·42	...	11·76	...	8·39	2nd „	
12·50	14·18	11·62		12·10	11·64	12·95	13·52	14·32	12·00	11·57	14·76	...	12·50	9·81	1st half	193
12·50	12·54	11·62		12·10	11·64	12·96	14·09	13·40	12·00	11·57	14·76	...	12·50	8·84	2nd „	
57,305	14,128	24,278		116,706	18,113	105,362	25,783	15,003	105,641	75,834	2,054	...	659	3,743	1st half	194
54,149	15,308	23,420		119,434	18,688	112,168	25,777	14,936	109,430	73,561	2,061	...	679	4,257	2nd „	
94,301	30,062	24,668		211,320	24,331	168,803	32,297	25,654	199,601	143,974	1,552	433	968	2,599	1st half	195
103,783	21,495	30,094		94,930	10,618	141,790	29,101	17,827	112,803	130,309	823	134	597	3,801	2nd „	
11·50	...	...		13·66	12·19	10·56	‖&¶ 9·50	10·92	††12·76	12·50	...	...	3·50	0·67	1st half	196
11·50	...	...			12·58	10·78	‖&¶ 10·00	11·15	††13·02	12·50	...	1·00	4·00	1·17	2nd „	
†15·50	...	...		13·78	13·21	7·34	...	...	††14·64	*15·50	...	...	...	0·25	1st half	197
†15·50	...	...			13·71	7·84		...	††14·88	*16·00	...	...	...	0·75	2nd „	
5·18	...	0·55		11·56	1·32	2·21	‖&¶ 0·25	3·37	††1·73	1·71	...	...	...	...	1st half	198
4·17	¶0·75	0·67			0·91	2·43	‖&¶ 0·46	2·38	††7·58	2·89	...	94·58	...	...	2nd „	
†2·24	...	...		14·21	0·10	0·31	...	...	††0·56	*0·40	...	...	...	...	1st half	199
†0·03	...	...			0·05	...		...	‡‡0·24	*0·39	...	...	...	...	2nd „	

Included with the Assam-Bengal.

* Steel sleepers.
† Total iron and steel.
‡ Bengal and North-Western (Company's section) only.
§ Information not furnished.
‖ Jodhpur railway only.
¶ Total wood and steel sleepers.
†† South Indian railway only.

Appendix 19.
Train and Engine-mileages.

APPEN
(Appendix 20

Train and engine-mileage in

(Referred to in paragraph

N.B.—A reference to Appendix 1 will furnish the key to the

Gauge.	5′ 6″																
Number.	1	2 (a), (b) & (d).		3 (a), (c) to (f) & (m) & (n)	4 (a).	5 (a) to (d).	6 (a) to (f).	7 (a) to (c).	8 (a) & (b).	9 (a) to (h).			10 (a) & (b).	11 (a) & (b).	12 (a) to (c).	13 (a) & (b).	14 (a) to (d).
										N. W. system.							
Calendar year.	B. C.	B. N.	E. C.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.	N. G. S.	Comml. section.	Mily. section.	Total.	O. and R.	A. B.	B. and N. W. **	B. D.	B. G. J. P.
TRAIN-MILEAGE—PASSENGER TRAINS.																	
1899	92	494	16	1,208	794	2,576	§4,506	953	92	2,052	17	2,069	589	5	582	4	87
1900	47	657	86	1,244	820	2,673	§4,629	1,023	90	2,153	27	2,180	670	1	693	3	93
1901	48	1,355	†	1,408	844	2,627	4,519	1,576	89	2,297	29	2,326	840	7	719	...	86
1902	49	1,494	†	1,408	878	2,636	5,061	1,453	94	2,608	41	2,644	1,258	4	1,185	...	83
1903	59	1,518	†	1,461	965	3,964	5,821	1,445	92	3,664	125	3,789	1,827	3	901	...	87
GOODS TRAINS.																	
1899	97	538	135	1,252	768	8,123	§5,577	425	349	3,693	237	3,930	1,012	212	715	4	156
1900	124	1,451	340	1,370	804	9,104	§6,122	547	632	2,833	307	3,140	1,010	197	701	5	226
1901	100	916	†	837	793	9,494	6,301	1,163	327	4,454	405	4,859	1,383	90	962	1	103
1902	101	1,021	†	760	884	9,942	7,164	1,005	381	4,598	508	5,106	1,468	118	1,086	17	80
1903	134	2,036	†	766	826	9,028	7,321	925	368	5,419	583	6,002	1,454	164	1,085	62	94
MIXED TRAINS.																	
1899	218	1,249	1,213	506	406	3,662	§1,444	1,269	469	2,991	947	3,938	1,342	394	1,302	30	372
1900	247	1,161	1,418	569	381	3,902	§1,364	1,170	529	3,038	971	4,009	1,651	401	1,426	50	364
1901	222	1,408	†	436	369	4,161	1,890	1,802	528	3,480	1,125	4,605	1,794	557	1,728	120	329
1902	215	1,714	†	457	368	4,287	2,033	2,142	535	3,496	1,265	4,761	1,440	627	1,697	122	325
1903	272	1,066	†	539	317	3,245	1,793	2,271	534	3,479	1,284	4,763	992	672	2,053	152	331
TOTAL TRAIN-MILEAGE. ††																	
1899	410	2,328	1,493	3,002	2,007	14,810	¶11,739	2,721	953	8,967	1,297	10,264	3,066	612	2,828	39	615
1900	424	3,319	1,984	3,254	2,046	16,187	¶12,377	2,811	1,310	8,284	1,357	9,641	3,436	599	3,067	58	685
1901	375	3,741	†	2,786	2,047	16,840	12,938	4,659	997	10,475	1,642	12,117	4,076	655	3,400	125	519
1902	368	4,291	†	2,711	2,177	16,865	14,445	4,600	1,010	11,116	1,896	13,012	4,281	759	3,968	139	488
1903	466	4,619	†	2,874	2,154	16,236	15,105	4,641	994	12,939	2,114	15,053	4,415	856	4,039	216	512
ENGINE-MILEAGE.—PASSENGER TRAINS.																	
1899	255	832	630	1,456	1,056	5,481	5,131	1,247	222	3,767	509	4,276	1,428	186	1,326	21	332
1900	220	945	697	1,571	1,072	5,976	5,252	1,321	264	4,035	544	4,579	1,774	204	1,531	33	334
1901	195	1,387	†	1,652	1,212	4,681	5,489	1,573	318	5,239	751	5,990	2,170	564	1,720	...	312
1902	268	1,524	†	1,630	1,246	5,054	6,150	1,452	349	5,087	821	5,908	2,302	629	1,185	...	292
1903	473	1,551	†	(a)1,680	1,282	4,884	6,380	1,444	88	5,832	987	6,819	2,550	673	2,075	...	293
GOODS TRAINS.																	
1899	198	1,748	1,023	2,035	1,786	12,695	8,269	2,034	880	6,429	929	7,358	2,153	532	1,999	30	330
1900	284	2,733	1,475	2,243	1,815	14,034	8,947	2,080	1,221	5,482	973	6,455	2,301	493	2,050	55	412
1901	272	2,786	†	1,621	1,658	16,357	9,398	3,900	846	6,753	1,083	7,836	2,601	213	2,252	252	254
1902	192	3,282	†	1,747	1,822	16,181	10,439	4,024	844	7,659	1,271	8,930	2,686	259	3,410	165	237
1903	106	3,754	†	(a)1,785	1,808	15,656	10,935	4,121	1,080	8,949	1,318	10,267	2,600	398	3,017	227	275
TOTAL ENGINE-MILEAGE.																	
1899	453	2,581	1,653	3,491	2,842	18,176	13,400	3,281	1,103	10,196	1,438	11,634	3,581	718	3,325	51	662
1900	504	3,678	2,172	3,814	2,887	20,010	14,199	3,401	1,485	9,517	1,517	11,034	4,075	697	3,581	88	746
1901	467	4,173	†	3,273	2,870	21,038	14,887	5,473	1,164	11,992	1,835	13,827	4,771	777	3,972	152	566
1902	460	4,806	†	3,377	3,068	21,235	16,589	5,476	1,193	12,746	2,092	14,838	4,988	888	4,595	165	529
1903	579	5,305	†	(a)3,465	3,090	20,540	17,315	5,565	1,168	14,781	2,305	17,086	5,150	1,071	5,092	227	568

† Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
§ Excluding the Gwalior Light 2′ 0″ gauge railway.
¶ Includes the Gwalior Light 2′ 0″ gauge railway.
(a) Includes the Godhra-Ratlam-Nagda railway.

DIX 19.

in Report for 1902.)

thousands *of miles*

24 of Report.)

letters used to denote railways.

Appendix 19.

Train and Engine-mileages.

3′ 3¾″																	Gauge.
15	16	17 (*a*) & (*b*).	4 (*b*) to (*e*).	8 (*c*).	18 (*a*) to (*c*).	7 (*d*) & (*e*).	19 (*a*) & (*b*).	3 (*b*) & (*g*) to (*l*).	20 (*a*) to (*e*).	21 (*a*) to (*g*).	21 (*h*).	22	Total of 5′ 6″ gauge railways.	Total of 3′ 3¾″ gauge railways.	Total 2′ 6″ and 2′ 0″ gauge railways.	* Total.	Number.
B.	D.	D.S.	E. B. S.	H. G. V.	J. B.	N. & S. C.	R. and K.	R. M.	S. I.	S. M.	W. I. E.	U. C.					Calendar year.
TRAIN-MILEAGE.—PASSENGER TRAINS.																	
396			273	...	4	13	10	663	1,198	300	33	1	13,384	3,569	86	17,039	1899
392			358	...	4	23	12	651	1,200	434	41	...	14,119	3,905	90	18,114	1900
412	‡‡	‡‡	385	1	11	25	15	651	943	656	10	...	15,627	3,912	162	19,701	1901
667			406	7	13	23	18	684	852	620		1	16,975	4,563	170	21,708	1902
850			422	4	15	34	16	901	912	616		2	20,941	4,763	185	25,889	1903
GOODS TRAINS.																	
332		94	727	...	169	12	179	3,348	1,110	1,091	33	2	22,206	8,235	171	30,612	1899
583		86	849	51	165	15	170	4,311	780	1,226	43	15	24,644	9,373	235	34,252	1900
634	‡‡	94	838	88	124	17	168	3,508	660	671	25	1	26,123	7,982	169	34,274	1901
795		85	820	224	95	32	189	2,822	726	915		...	27,832	8,004	183	36,019	1902
907		79	901	259	108	22	173	1,855	759	765		...	28,860	7,228	220	36,308	1903
MIXED TRAINS.																	
1,915		142	986	13	373	...	377	2,684	1,002	1,418	...	47	15,716	11,055	118	26,889	1899
2,069		141	994	318	386	...	381	2,718	1,227	1,770	...	50	16,401	12,325	101	28,827	1900
2,116	‡‡	144	1,052	568	674	...	402	2,829	1,661	1,820	57	50	17,215	14,107	239	31,561	1901
1,870		134	1,056	576	771	44	401	3,020	1,804	2,100		51	17,952	14,598	231	31,781	1902
2,009		142	1,125	568	831	91	412	3,036	1,962	2,114		50	15,132	15,438	218	31,488	1903
**TOTAL TRAIN—MILEAGE.†† **																	
2,946	15	237	2,039	28	574	26	580	6,793	3,396	2,888	116	51	52,793	23,783	631	77,207	1899
3,415	15	227	2,259	457	627	38	580	7,771	3,254	3,493	84	66	56,789	26,695	709	84,193	1900
3,594	15	255	2,325	755	843	42	604	7,125	3,343	3,231	90	52	60,576	26,978	716	88,265	1901
3,743	15	219	2,385	807	949	99	635	6,660	3,539	3,635		52	63,766	28,042	725	92,527	1902
4,321	16	221	2,494	831	957	147	626	5,916	3,819	3,569		52	66,557	28,592	811	95,960	1903
ENGINE-MILEAGE.—PASSENGER TRAINS.																	
1,307		47	849	25	186	13	166	2,206	1,710	796	33	28	22,015	9,233	‡‡	31,248	1899
1,344		57	892	139	196	23	179	2,264	1,329	1,157	41	23	23,671	10,246		33,917	1900
387	‡‡	48	1,437	315	352	25	279	2,238	1,773	673	37	56	24 667	10,216	‡‡	34,883	1901
645		45	1,462	362	419	22	298	2,950	1,754	682		56	25,883	10,811		36,694	1902
831		47	1,488	374	441	33	375	(*b*)2,849	1,803	600		55	27,151	12,000	280	39,431	1903
GOODS TRAINS.																	
2,264		286	1,724	...	420	18	538	5,563	2,204	2,452	90	30	40,179	18,475	‡‡	58,654	1899
2,793		296	1,927	358	461	17	532	6,586	1,804	2,758	45	49	43,538	20,636		64,224	1900
4,004	‡‡	312	1,441	507	487	19	466	5,863	1,878	2,952	55	...	47,275	20,955	66	68,296	1901
3,958		302	1,427	534	566	85	484	4,440	2,130	3,411		...	50,147	21,408	65	71,620	1902
4,429		398	1,583	553	568	134	391	(*b*)3,940	2,345	3,406		...	52,112	21,574	440	74,126	1903
TOTAL ENGINE-MILEAGE.																	
3,571	15	333	2,573	25	606	26	704	7,769	3,914	3,250	123	58	62,195	27,723	637	90,555	1899
4,137	15	353	2,819	497	657	40	711	8,850	3,823	3,915	86	72	67,259	30,887	716	98,862	1900
4,391	15	360	2,878	822	839	44	745	8,101	3,651	3,625	92	56	71,943	31,086	731	103,760	1901
4,604	15	347	2,889	896	995	107	782	7,390	3,884	4,093		56	76,030	32,235	739	109,004	1902
5,260	16	355	3,071	927	1,012	167	766	(*b*)6,789	4,208	4,006		55	79,263	33,590	874	113,727	1903

* Including the Cawnpore-Burhwal 3′ 3¾″ gauge link.
†† Includes miscellaneous train-mileage.
‡‡ Information not available.
(*b*) Excludes the Godhra-Rutlam-Nagda railway.

Appendix 20.
Unit and ton-mileages.

APPEN

(Appendix 20 in Report

Unit-mileage of passengers and ton-mileage of

(Referred to in paragraph

N.B.—A reference to Appendix 1 will furnish the key to the

Gauge.	5′ 6″																
Class: No.	1	2 *a, b & d*		3 *a, e to f, m & n.*	4 *a*	5 *a to d*	6 *a to f.*	7 *a to c.*	8 *a & b.*	9 *a to k.*			10 *a & b.*	11 *a & b.*	12 *a to c.*	13 *a & b*	14 *a to d.*
										N. W.							
Calendar year.	B. C.	B. N. system.	E. C.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.	N. G. S.	Commit. section.	Mily. section.	Total.	O. and R.	A. B.	B. and N. W.	B. D.	B. G. J. P.
UNIT MILEAGE—1st CLASS.																	
1899	*b* 121	*b* 751	623	*b* 3,169	*b* 1,753	*b* 8,453	*b* 12,037	*b* 3,559	*b* 709	5,108	535	6,643	*e* 2,051	235	*b f* 583	12	*b* 379
1900	*b* 100	*b* 1,006	932	*b* 3,060	*b* 1,611	*b* 8,561	*b* 11,392	*b* 3,413	*b* 623	5,893	629	6,522	2,541	250	*b* 703	15	*b* 306
1901	82	1,642	†	2,546	1,379	8,370	11,300	3,727	533	6,392	737	7,129	2,592	265	767	12	318
1902	95	2,075	†	2,675	1,537	10,367	13,990	4,331	626	6,607	780	7,477	3,048	310	837	11	253
1903	107	2,436	†	2,720	1,674	10,431	14,026	4,192	620	7,504	860	8,364	3,361	351	823	13	309
2ND CLASS.																	
1899	*b* 784	*b* 2,059	1,640	*b* 21,602	3,696	24,451	46,105	11,609	*b* 3,462	18,498	1,513	19,981	*e* 5,851	478	*b f* 1,042	35	*b* 2,597
1900	*b* 595	*b* 2,154	2,062	*b* 20,804	3,492	26,276	38,927	11,660	*b* 3,188	16,755	1,391	18,146	7,875	491	*b* 1,340	29	*b* 2,072
1901	593	5,436	†	15,632	3,647	27,332	45,750	19,598	3,219	21,122	1,023	22,745	8,900	582	1,652	31	2,039
1902	556	5,595	†	15,328	3,832	29,335	48,078	11,880	3,272	22,772	2,141	24,913	10,685	630	1,966	40	1,773
1903	578	5,800	†	15,720	4,184	27,918	55,325	12,294	3,881	26,981	2,093	29,079	10,379	712	2,092	45	2,042
INTERMEDIATE CLASS.																	
1899	*b* 1,911	*b* 2,633	856	*b* 42,396	19,766	76,556	67,945	...	*a b* 8,983	48,268	3,063	51,331	*e* 15,372	...	*b f* 2,213	35	*b* 76
1900	*b* 1,978	*b* 3,502	1,456	*b* 43,475	18,313	84,798	73,878	...	*a b* 8,776	56,585	3,287	59,872	17,699	50	*b* 3,423	31	*b* 1,624
1901	2,333	11,097	†	46,547	19,646	89,109	82,495	1,792	*a* 9,615	70,967	3,578	74,545	22,784	243	4,039	45	2,092
1902	2,437	10,923	†	45,562	21,055	92,383	89,331	2,031	*a* 10,029	71,629	4,639	76,268	27,502	308	5,814	84	2,206
1903	2,622	11,099	†	46,505	23,714	99,800	87,526	2,876	*a* 9,442	76,426	4,976	81,402	35,900	351	7,610	117	2,584
3RD CLASS.																	
1899	*b* 35,918	*b* 173,340	143,825	*b* 241,938	166,475	1,100,173	537,368	226,751	*bd* 47,760	712,665	83,095	800,760	*e* 252,017	52,477	*bf* 234,508	2,587	*b* 62,145
1900	*b* 37,962	*b* 269,384	172,791	*b* 281,290	168,437	1,183,966	529,285	276,735	*bd* 51,602	767,852	86,156	854,008	275,227	55,479	*b* 268,930	2,960	*b* 56,710
1901	39,930	413,292	†	269,357	172,037	1,289,216	672,235	402,470	*d* 53,186	832,458	98,301	930,759	340,782	65,985	347,120	4,968	59,980
1902	40,078	405,363	†	273,549	168,177	1,210,723	660,017	424,582	*d* 53,319	806,453	104,974	921,427	328,010	63,386	386,643	5,676	51,743
1903	40,137	394,161	†	290,147	173,614	1,262,209	681,718	446,023	*d* 51,913	962,366	108,021	1,070,387	344,593	67,294	447,434	6,892	57,497
SEASON AND VENDORS' TICKETS.																	
1899	*c*	*c*	...	*c*	*c*	*c*	*c*	*c*	*c*	...	...	...	...	...	*c*	...	*c*
1900	*c*	*c*	...	*c*	*c*	*c*	*c*	*c*	*c*	...	...	...	...	...	*c*	...	*c*
1901	1,002	799	†	43,035	12,213	16,376	37,114	9,052	376	...	...	...	...	...	65	...	79
1902	1,163	1,443	†	46,105	12,009	18,004	35,552	10,294	768	...	...	...	...	...	66	...	50
1903	1,359	1,690	†	50,967	12,813	17,257	35,469	11,441	824	...	...	...	...	...	68	...	134
TOTAL UNIT-MILEAGE.																	
1899	39,734	178,792	146,944	309,105	191,684	1,209,633	963,455	244,919	60,914	796,509	88,206	878,715	*e* 276,291	53,190	*f* 238,346	2,669	65,197
1900	40,635	286,046	177,261	348,649	191,903	1,383,595	703,482	291,898	64,189	847,085	91,463	938,548	303,342	56,220	274,456	3,035	60,712
1901	44,030	432,166	†	372,167	208,922	1,429,403	853,804	427,549	66,879	930,939	104,239	1,035,178	375,058	67,078	354,543	5,056	64,478
1902	44,331	425,399	†	383,225	206,610	1,360,830	862,018	453,118	63,013	987,551	112,534	1,090,085	369,245	64,634	397,326	5,811	56,025
1903	44,803	415,176	†	405,059	216,199	1,417,665	874,084	476,766	66,680	1,067,277	115,955	1,183,232	394,233	68,708	458,027	7,007	62,566
FREIGHT TON-MILEAGE.—COACHING.																	
1899	2,719	11,790	9,440	24,294	12,990	89,279	54,043	18,169	4,443	86,247	6,448	62,695	118,816	3,521	15,136		4,305
1900	2,728	12,868	11,600	27,165	13,131	99,086	57,235	21,727	3,736	60,681	6,926	67,607	20,958	3,699	17,362		4,049
1901	2,942	28,480	†	‖28,676	14,162	107,060	65,935	30,001	4,755	65,174	7,898	73,072	25,579	4,047	22,358	‡‡	4,229
1902	2,946	28,113	†	‖ 29,366	14,064	102,226	70,127	32,427	5,010	68,772	8,466	77,238	25,654	4,241	25,192		3,716
1903	2,989	27,178	†	‖ 29,662	15,034	107,928	70,959	33,603	4,843	77,551	8,371	85,922	27,353	4,636	29,128		4,177
GOODS.																	
1899	9,918	228,627	93,188	333,403	136,442	18,52,679	905,331	159,429	121,151	820,625	58,863	879,488	‡203,458	33,906	149,985		17,412
1900	15,920	383,691	162,950	374,854	143,604	2,024,307	975,654	158,242	92,656	639,665	56,510	696,175	190,201	30,714	156,381		20,953
1901	12,260	230,626	†	‖307,389	131,327	2,149,247	1,057,031	306,209	107,030	1,047,284	71,096	1,118,380	239,439	30,517	165,049	‡‡	13,944
1902	10,916	306,812	†	‖ 274,954	156,920	2,040,472	1,262,128	291,483	114,280	1,000,840	71,561	1,072,421	244,498	28,360	172,119		12,199
1903	15,620	362,067	†	‖ 294,571	153,624	2,227,442	1,223,647	283,145	105,853	1,240,293	66,193	1,315,489	257,503	36,153	213,814		15,187
TOTAL FREIGHT TON-MILEAGE.																	
1899	12,637	240,417	102,637	363,703	149,432	1,941,958	959,374	177,599	125,594	876,872	65,311	942,183	‡222,274	37,427	165,121		21,717
1900	18,646	401,559	173,550	402,019	158,725	2,123,393	1,032,889	179,969	96,392	700,346	63,436	763,782	211,249	34,413	173,743		25,002
1901	15,202	259,086	†	‖336,065	145,489	2,256,307	1,122,966	336,210	111,785	1,112,458	78,994	1,191,453	265,018	34,564	187,407	‡‡	18,173
1902	13,862	334,925	†	‖ 304,320	170,984	2,142,698	1,332,255	323,910	119,290	1,069,632	80,027	1,149,659	270,152	32,641	197,311		15,915
1903	18,609	389,265	†	‖ 324,233	168,658	2,335,370	1,294,636	316,748	110,696	1,326,847	74,564	1,401,411	284,856	40,789	242,942		19,364
GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).—COACHING.																	
1899	53,905	231,010	185,437	361,741	238,047	1,386,190	1,147,205	240,721	67,319	961,980	123,202	1,085,182	‡354,329	47,995	197,499		50,421
1900	49,396	250,892	210,012	398,780	249,256	1,452,274	1,215,362	261,043	100,666	995,789	129,572	1,126,761	410,141	47,628	227,625		49,546
1901	46,800	464,912	†	‖424,951	252,207	1,628,808	1,322,051	418,638	79,740	1,114,483	147,049	1,261,532	491,726	63,109	225,437	‡‡	44,137
1902	49,053	517,561	†	‖ 440,048	258,881	1,745,220	1,456,365	493,953	85,359	1,209,978	169,120	1,379,098	526,988	69,957	351,634		45,693
1903	54,739	503,404	†	‖ 453,669	271,635	1,944,669	1,514,898	503,279	86,153	1,328,884	188,566	1,517,450	593,250	75,713	378,874		46,595
GOODS.																	
1899	41,995	668,341	276,919	847,115	408,776	4,131,453	2,535,031	531,185	310,736	2,236,836	208,935	2,445,771	‡583,660	107,316	338,715		52,688
1900	63,618	991,849	462,514	1,003,499	444,683	4,502,940	2,815,624	531,638	450,042	1,702,564	267,471	1,970,035	553,353	85,981	335,886		64,505
1901	41,395	731,054	†	‖708,804	396,504	4,817,717	3,007,685	975,400	293,033	2,632,007	247,453	2,879,460	714,478	77,435	382,895	‡‡	39,978
1902	45,293	905,856	†	‖ 632,188	466,902	4,933,975	3,495,487	896,681	304,029	2,617,369	262,479	2,879,848	757,100	77,691	419,289		37,538
1903	45,191	1,009,413	†	‖672,720	757,733	5,117,868	3,492,583	906,290	290,543	3,253,253	253,512	3,506,765	767,487	74,539	512,536		44,400
TOTAL GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).																	
1899	95,900	899,351	462,356	1,208,856	646,823	5,517,643	3,682,236	771,906	378,055	3,198,816	332,137	3,530,953	‡937,989	145,311	536,214		103,109
1900	113,014	1,242,741	672,526	1,402,279	692,939	5,955,214	4,030,986	792,681	550,708	2,698,353	397,443	3,096,796	963,494	133,609	563,511		114,051
1901	88,195	1,195,966	†	‖1,133,755	648,711	6,446,525	4,329,736	1,394,038	372,843	3,746,490	394,502	4,134,993	1,206,144	140,594	608,332	‡‡	88,115
1902	94,346	1,423,417	†	‖1,072,236	725,783	6,679,195	4,951,852	1,390,634	389,388	3,827,347	431,599	4,258,946	1,284,089	147,649	770,923		83,231
1903	9,930	1,512,817	†	‖1,126,389	729,368	7,062,537	5,007,480	1,409,569	376,696	4,582,137	442,078	5,024,215	1,360,737	150,252	891,410		90,995

* The freight and gross ton-mileage figures exclude the 2′ 0″ and 2′ 6″ gauge railways.
† Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
‡ Including the Cawnpore-Burhwal 3′ 3½″ gauge link as the figures cannot be separated.
‖ Including the Godhra-Butlam-Nagda railway. *a* Third class by mail train. *b* Includes season and vendors' tickets. *

DIX 20.

for 1902.)

coaching and goods in thousands *of miles.*

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letters used to denote railway systems.

Appendix 20.

Unit and ton-mileages.

15	16	17	4	8	18	7	19	3	20	21	21	22	Total of 5′ 6″ gauge railways.	Total of 3′ 3½″ gauge railways.	Total 2′ 6″ and 2′ 0″ gauge railways.	Total.	Gauge. Class No. Calendar year.
B.	D.	D. S.	E. B. S.	H. G. V.	J. B.	N. & S. C.	R. and K.	R. M.	S. I.	S. M.	W. I. P.	U. C.					
3′ 3½″																	
UNIT MILEAGE—1ST CLASS.																	
b 1,482	b	92	b 765	b 8	96	b 29	243	b 1,890	b 1,286	b 1,382	29	29	39,869	8,545	279	48,693	1899
b 1,539	b	83	b 790	b 149	76	b 70	229	b 1,758	b 1,384	b 1,595	31	30	39,761	9,013	287	49,061	1900
1,690	‡‡	81	831	352	259	69	288	1,906	1,432	1,546	34	27	39,200	9,871	324	49,395	1901
1,591	‡‡	78	890	422	295	90	289	2,406	1,682	1,846		31	46,241	11,021	318	57,580	1902
2,132	‡‡	78	1,013	321	389	110	287	2,570	1,953	1,643		47	47,981	12,039	393	60,413	1903
2ND CLASS.																	
b 6,170	...	67	b 2,702	b 34	492	b 47	1,011	b 6,985	b 5,030	b 5,265	154	67	141,340	32,166	971	174,477	1899
b 6,688	...	65	b 2,527	b 817	475	b 111	1,106	b 6,160	b 5,811	b 5,446	185	62	135,193	33,385	907	169,485	1900
7,354	‡‡	62	2,962	1,968	1,352	134	1,613	8,009	5,562	5,055	168	75	143,812	38,588	1,104	183,504	1901
5,505	‡‡	64	2,827	2,328	1,396	243	1,918	7,647	5,991	6,464		86	168,476	38,901	1,063	208,440	1902
6,691	‡‡	64	3,334	1,952	1,489	447	1,429	7,849	7,354	5,582		100	159,098	41,182	1,292	201,572	1903
INTERMEDIATE CLASS.																	
b 5,267	...	...	b 8,776	...	...	...	461	b 17,852	...	...	...	98	287,743	34,778	1,235	323,756	1899
...	...	...	b 9,557	...	...	...	464	b 18,771	...	...	...	124	313,747	34,044	1,323	349,114	1900
...	‡‡	...	11,672	...	...	...	563	20,515	...	...	...	129	356,873	40,196	62	400,133	1901
...	‡‡	...	11,523	...	...	...	612	19,445	...	...		145	377,577	40,137	...	417,714	1902
...	‡‡	...	13,658	...	...	...	539	19,735	...	...		173	399,891	44,767	33	444,691	1903
3RD CLASS.																	
b 267,580	1,063	4,864	b 138,377	b 770	47,846	b 501	38,623	b 524,901	b 381,085	b 137,157	2,959	7,978	3,731,234	1,904,921	12,23[7]	5,648 442	1899
b 287,879	1,106	5,528	b161,733	b 27,763	41,691	b 882	40,396	b 504,301	b 435,439	b 218,030	3,189	7,182	4,140,737	2,119,208	12,19[5]	6,272,140	1900
296,885	‡‡	4,988	168,146	61,847	73,087	1,101	50,345	591,278	457,826	233,818	3,253	8,399	4,587,214	2,429,029	20,707	7,036,950	1901
314,819	‡‡	5,224	177,815	63,597	73,749	7,132	50,413	547,108	499,402	249,378		8,239	4,535,243	2,505,314	14,294	7,054,851	1902
376,415	‡‡	5,213	194,759	58,602	80,103	15,563	43,485	575,322	576,943	255,920		8,329	4,755,102	2,775,371	15,357	7,545,830	1903
SEASON AND VENDORS' TICKETS.																	
c	...	...	c	c	...	c	...	c	c	c	...	...	...	...	...	...	1899
c	...	...	c	c	...	c	...	c	c	c	...	...	...	...	...	...	1900
649	‡‡	...	427	236	...	18	...	194	4,972	324	...	...	120,057	6,961	77	127,095	1901
708	‡‡	...	416	374	...	22	...	151	5,501	329		...	125,337	7,617	...	132,954	1902
813	‡‡	...	415	368	...	133	...	200	1,727	356		...	131,830	4,214	...	136,044	1903
TOTAL UNIT MILEAGE																	
280,499	1,068	5,023	150,620	812	47,924	577	40,338	551,628	387,401	143,804	3,142	8,172	4,200,186	1,980,410	14,772	6,195,368	1899
296,106	1,111	5,676	174,607	28,729	42,242	1,063	42,195	530,990	442,634	225,071	3,405	7,348	4,629,438	2,195,650	14,712	6,839,800	1900
306,578	‡‡	5,131	184,038	64,403	74,698	1,319	52,809	621,896	469,792	240,743	3,455	8,630	5,250,156	2,524,647	22,274	7,797,077	1901
322,623	‡‡	5,366	193,471	66,721	75,440	7,480	53,232	576,757	511,576	258,037		8,491	5,252,874	2,602,990	15,675	7,871,539	1902
386,051	17	5,355	213,179	61,243	82,681	16,253	50,740	605,676	587,977	263,501		8,649	5,493,902	2,877,590	17,075	8,388,567	1903
FREIGHT TON-MILEAGE—COACHING.																	
17,920			9,686	...	3,253	...	2,689	37,512	24,293	30,201	‡‡	554	308,687	129,075		437,762	1899
21,766	‡‡	‡‡	11,079	...	2,854	...	2,813	35,836	27,891	15,344		477	252,829	143,463	‡‡	396,292	1900
22,785			12,106	4,162	5,016	106	3,488	42,360	29,546	16,283		561	380,642	166,291		546,933	1901
21,127			12,706	4,607	5,249	493	3,519	39,756	32,204	17,844		568	387,171	171,262		558,433	1902
24,955			14,203	4,186	5,657	1,043	3,369	g 42,269	36,812	18,054		582	405,501	189,071	122	594,694	1903
GOODS.																	
125,056			78,606	...	31,896	...	25,683	514,611	92,252	167,054	‡‡	1,331	4,929,120	1,237,797		6,166,917	1899
155,473	‡‡	‡‡	91,628	...	33,287	...	24,583	646,018	94,838	170,257		2,897	1,427,029	5,219,444	‡‡	6,646,473	1900
171,176			85,847	21,914	32,350	253	24,318	606,245	110,866	135,434	3,382	1,632	5,658,938	1,402,927		7,061,865	1901
180,253			94,046	26,917	37,271	1,137	28,629	531,677	124,577	159,002		1,557	5,774,884	1,397,744		7,172,628	1902
181,569			111,135	27,767	42,221	2,702	28,162	g 414,581	149,265	162,724		764	6,238,981	1,386,044	1,942	7,626,967	1903
TOTAL FREIGHT TON-MILEAGE.																	
142,976			88,292	...	35,154	...	28,377	552,123	116,545	197,255	‡‡	1,895	5,237,807	1,366,872		6,604,679	1899
177,239	‡‡	‡‡	102,707	...	36,141	...	27,396	681,854	122,722	185,601		3,374	5,562,273	1,570,192	‡‡	7,132,465	1900
193,961			97,953	26,076	37,366	350	27,806	647,605	140,412	151,777	3,626	2,193	6,039,580	1,569,218		7,608,798	1901
201,380			106,753	31,524	42,520	1,630	32,148	571,433	156,781	176,846		2,125	6,162,055	1,569,006		7,731,061	1902
206,524			125,338	31,953	47,878	3,745	31,531	g 456,950	186,077	180,778		1,346	6,644,482	1,575,115	2,064	8,221,661	1903
GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT)—COACHING.																	
225,786			115,630	...	38,193	...	32,814	345,631	269,239	129,774	5,406	5,799	5,351,086	1,449,187		6,800,273	1899
221,958	‡‡	‡‡	131,409	26,050	32,899	...	33,536	351,418	286,060	184,292	5,587	5,706	5,722,583	1,603,714	‡‡	7,326,297	1900
243,119			141,244	60,681	65,301	1,568	37,780	364,568	285,752	208,036	5,358	6,014	6,391,365	1,756,104		8,147,469	1901
289,708			135,816	64,567	73,674	5,480	39,526	396,055	296,024	231,507		6,025	6,952,527	2,005,666		8,958,193	1902
354,683			156,382	65,185	79,415	11,399	42,361	g 468,513	326,174	232,469		6,534	7,443,146	2,243,302	774	9,687,222	1903
GOODS.																	
347,946			232,335	...	81,184	...	65,701	1,181,527	278,296	424,028	15,329	4,340	12,760,982	3,128,805		15,909,787	1899
399,626	‡‡	‡‡	252,523	49,909	81,653	...	61,902	1,452,285	244,772	457,125	7,109	8,466	13,720,785	3,501,724	‡‡	17,231,571	1900
436,637			251,690	73,045	89,367	1,301	61,952	1,312,212	288,965	363,056	8,823	4,716	14,565,520	3,391,212		17,956,732	1901
477,067			271,764	82,731	99,031	5,476	68,039	1,156,578	318,097	429,523		4,392	15,317,359	3,447,216		18,764,575	1902
515,325			304,892	86,712	108,425	12,999	70,058	g 873,835	374,801	428,837		2,783	16,266,592	3,410,142	446	19,677,180	1903
TOTAL GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT).																	
573,732			347,965	...	114,377	...	97,915	1,527,158	537,535	553,802	20,735	10,139	18,132,068	4,577,992		22,710,060	1899
621,584	‡‡	‡‡	383,932	75,959	114,552	...	95,438	1,803,703	530,832	641,407	12,696	14,166	19,452,368	5,105,440	‡‡	24,557,808	1900
679,756			392,934	133,726	154,668	2,869	98,832	1,676,780	574,707	571,092	14,181	10,730	20,956,885	5,147,316		26,104,201	1901
786,775			407,580	147,298	172,705	10,956	107,565	1,552,633	614,121	661,030		10,417	22,269,886	5,452,882		27,722,769	1902
876,013			461,274	151,897	187,840	24,398	111,419	g1,342,348	700,975	661,306		9,317	23,709,733	5,653,444	1,220	29,364,402	1903

** Including the Cawnpore-Burhwal 3′ 3½″ gauge link.
‡‡ Information not available.
c Figures included under different classes.
d Third class by other than mail trains.
e Including the Cawnpore-Burhwal 3′ 3½″ gauge link.
f Excluding the Cawnpore-Burhwal 3′ 3½″ gauge link.
g Excluding the Godhra-Ratlam-Nagda railway.

Appendix 21.
Vehicle mileage.

APPEN
(Appendix 21

Loaded and empty vehicle mileage

(Referred to in par[a]

Number.		Railways.	COACHING.																	
			Home vehicle mileage on home line.														Foreign			
			1899.			1900.			1901.			1902.			1903.			1899.		
Main head.	Sub-head.		Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
		5′ 6″ gauge.*																		
1	(a)	Bengal Central .	3,344	386	3,730	3,126	391	3,517	3,004	345	3,349	2,902	516	3,418	3,236	566	3,802	1	...	1
2	(a)	Bengal-Nagpur . .	12,417	3,266	15,683	15,347	3,449	18,796	23,196	5,022	28,218	27,529	8,176	35,705	25,063	8,896	33,959	863	206	1,069
3	(a) to (f)	Bombay, Baroda and Central India.	20,728	2,044	22,772	23,583	2,078	25,660	24,874	3,126	28,000	25,420	3,069	28,489	26,028	3,251	29,279	63	21	84
4	(a)	Eastern Bengal State.	14,251	1,366	15,617	14,969	1,338	16,307	14,932	2,178	17,110	15,315	2,004	17,319	15,697	1,739	17,436	8	2	10
...	...	East Coast† . .	10,293	1,944	12,237	11,643	2,380	14,023	...	...	...	...	...	...	...	...	...	206	8	214
5	(a) to (d)	East Indian . .	84,376	18,113	102,489	85,781	19,479	105,260	93,685	18,409	112,494	94,698	21,030	115,728	94,168	20,560	114,728	1,388	238	1,626
6	(a)	Great Indian Peninsula.	49,485	...	49,485	53,476	...	53,476	71,487	...	71,487	76,098	15,884	91,982	78,993	15,880	94,873	3,916	223	4,139
6	(b) to (e)	Indian Midland‡ .	14,624	...	14,624	15,103	...	15,103	...	...	...	...	...	...	...	...	...	1,084	443	1,527
7	(a) to (e)	Madras . . .	14,867	6,521	21,388	16,175	6,850	23,025	23,390	9,453	32,843	24,430	9,280	33,710	25,755	9,191	34,946	486	69	555
8	(a) & (b)	Nizam's Guaranteed State.	4,509	79	4,588	4,881	85	4,966	7,415	82	7,197	6,765	102	6,867	6,773	101	6,874	128	70	198
9	(a) to (e)	North Western State.	63,095	17,197	80,292	64,477	16,731	81,208	70,049	10,756	80,805	73,701	22,972	96,673	82,878	21,408	104,286	711	146	857
10	(a) & (b)	Oudh and Rohilkhand State.	18,253	4,802	23,055	21,370	5,490	26,860	23,307	6,025	29,332	25,242	6,301	31,543	27,339	6,269	33,608	969	135	1,104
		3′ 3½″ gauge.																		
11	(a) & (b)	Assam-Bengal .	4,321	710	5,031	4,997	806	5,803	6,710	548	7,258	6,759	488	7,247	7,391	1,341	8,732	...	...	...
12	(a) to (e)	Bengal and North-Western.	23,930	143	24,073	27,788	106	27,894	32,788	2,256	35,044	39,333	6,808	46,141	42,910	7,571	50,481	...	...	...
14	(a) to (d)	Bhavnagar-Gondal-Junagad-Porbandar.	5,888	914	6,802	6,043	911	6,954	5,908	940	6,848	5,704	918	6,622	4,995	869	5,864	29	...	29
15	(a)	Burma . . .	27,756	4,687	32,443	28,592	4,542	33,134	28,627	7,978	36,605	29,379	4,778	34,157	32,832	6,968	39,800	...	...	...
16	(a)	Deoghur . .	...	...	...	...	...	...	...	...	...	8	2	10	...	...	...	...	...	...
4	(b) to (d)	Eastern Bengal State.	15,431	1,591	17,022	16,341	1,672	18,013	16,318	2,562	18,880	16,199	2,319	18,518	18,519	2,608	21,127	...	...	...
8	(c)	Hyderabad-Godavari Valley.	...	...	...	2,073	22	2,095	5,104	85	5,189	6,200	94	6,294	6,302	64	6,366	...	...	...
18	(a) to (e)	Jodhpur-Bikaner .	3,548	17	3,565	3,664	12	3,676	6,384	35	6,419	8,373	36	8,409	9,070	35	9,105	285	21	306
3	(g) to (l)	Rajputana-Malwa .	48,773	195	48,968	49,042	142	49,184	55,834	187	56,071	56,593	339	56,932	60,416	257	60,673	623	25	648
19	(a) & (b)	Rohilkund and Kumaon.	4,443	332	4,775	4,289	358	4,647	4,342	1,003	5,345	4,677	1,036	5,713	6,846	1,035	5,881	22	...	22
20	(a) to (e)	South Indian .	32,874	38	32,912	34,414	47	34,461	34,950	39	34,989	36,290	49	36,339	40,171	55	40,226	3	1	4
21	(a) to (g)	Southern Mahratta	14,013	1,799	15,812	19,701	2,428	22,129	21,617	2,205	23,822	24,615	5,123	29,738	24,890	5,324	30,214	74	23	97
21	(h)	West of India Portuguese.§	...	...	...	...	...	...	522	...	522	...	...	...	...	...	...	...	...	...
22	(a)	Udaipur-Chitor .	643	2	645	675	1	676	662	19	681	634	29	663	691	2	693	19	2	21
		2′ 6″ gauge.																		
2	(b) & (d)	Raipur-Dhamtari .	...	...	...	...	...	...	239	45	284	219	92	311	244	94	338	...	...	...
9	(f) & (g)	Nowshera-Durgai .	...	...	...	...	...	...	479	83	562	712	185	897	1,148	312	1,460	...	...	...
		Total Coaching	492,462	66,146	558,608	527,544	69,313	596,857	575,323	74,331	649,654	607,795	111,630	719,425	640,355	114,396	754,751	10,878	1,633	12,511

* Includes particulars relating to branches worked on different gauges to the

† Transferred partly to the Bengal-Nagpur railway and partly to the Madras

‡ Included with the Great Indian Peninsula railway system from 1901.

§ Included with the Southern Mahratta railway from 1902.

DIX 21.

in Report for 1902.)

in thousands *of miles.*

graph 24 of Report).

Appendix 21.

Vehicle mileage.

COACHING.

VEHICLE MILEAGE ON HOME LINE.												TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.					HOME VEHICLE MILEAGE ON FOREIGN LINES.					NUMBER.
1900.			1901.			1902.			1903.			1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	Main Lead.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.											
1	...	1	...	...	...	...	...	...	...	...	...	3,731	3,512	3,349	3,418	3,602	...	...	...	...	...	1
1,070	473	1,543	3,260	553	3,813	3,752	372	4,124	3,618	316	3,934	16,752	20,339	32,031	29,829	37,893	1,056	1,000	2,734	2,889	2,919	2
45	13	58	38	8	46	53	13	66	55	8	63	22,856	25,714	28,046	28,655	29,342	64	74	64	60	68	3
5	2	7	6	2	8	4	2	6	8	3	11	15,627	16,314	17,118	17,325	17,447	11	11	12	22	16	4
260	64	324	...	...	...	...	...	...	...	...	...	12,451	14,347	...	...	...	2	353	...	...	...	...
2,868	684	3,552	1,903	738	2,641	3,033	920	3,953	3,784	968	4,752	104,115	108,812	115,135	119,681	119,480	3,384	3,449	3,954	4,977	7,027	5
3,256	230	3,486	5,622	163	5,785	6,968	320	7,288	8,151	346	8,497	53,624	56,962	77,272	99,270	103,370	3,521	4,906	4,926	5,057	5,421	6
1,272	511	1,783	...	...	...	...	...	...	...	...	...	16,151	16,686	...	...	...	1,218	932	...	...	...	6
184	54	238	2,176	69	2,245	1,912	666	2,578	1,720	730	2,450	21,943	23,263	35,088	36,288	37,396	1,621	1,312	3,343	4,543	4,381	7
119	55	174	131	55	186	117	49	166	125	61	186	4,786	5,140	7,683	7,033	7,060	296	282	253	518	386	8
864	192	1,056	1,807	495	2,302	1,345	484	1,829	1,315	407	1,722	81,149	82,264	83,107	93,502	106,003	1,698	2,050	1,824	2,555	2,473	9
1,204	185	1,389	2,532	517	3,049	2,262	506	2,768	2,490	512	3,002	24,159	28,249	32,381	34,311	36,610	1,038	1,868	3,100	2,840	2,936	10
...	...	...	...	...	...	...	...	...	1	...	1	5,631	5,803	7,258	7,247	8,733	...	...	...	...	149	11
9	7	16	8	6	14	26	24	50	66	22	88	24,073	27,910	35,058	46,191	50,569	14	25	30	48	100	12
44	...	44	...	...	...	...	...	...	869	155	1,024	6,831	6,998	6,848	6,622	6,888	...	...	...	...	1,012	14
...	...	...	...	...	...	...	...	...	...	...	...	32,443	33,134	36,605	34,157	39,800	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	16
...	...	...	...	...	...	2	1	3	27	17	44	17,022	18,013	18,880	18,521	21,171	347	354	417	332	199	4
...	...	...	...	...	...	...	...	...	...	...	...	...	2,095	5,189	6,294	6,366	...	...	...	...	...	5
210	18	228	296	28	324	412	22	434	364	19	383	3,871	3,904	6,743	8,843	9,498	228	214	250	422	388	18
1,072	31	1,103	84	26	110	151	35	186	169	40	209	49,616	50,287	56,181	57,118	60,892	184	105	127	265	267	3
38	1	39	42	2	44	56	3	59	30	1	31	4,797	4,686	5,359	5,772	5,912	8	4	7	7	11	19
4	3	7	2	2	4	1	1	2	3	1	4	32,916	34,468	34,993	36,341	40,230	2	4	1	5	4	20
73	24	97	57	24	81	3	1	4	3	1	4	15,909	22,226	23,903	29,742	30,218	73	74	74	2	3	21
...	...	...	511	...	511	...	...	...	...	...	...	...	...	1,033	...	...	...	...	...	...	...	21
13	2	15	9	8	17	14	10	24	33	3	36	666	691	698	697	729	84	25	26	75	59	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	284	311	338	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	562	897	1,460	...	...	...	...	...	9
12,611	2,549	15,160	18,484	2,696	21,180	20,111	3,429	23,540	22,931	3,610	26,441	571,119	612,017	670,834	742,965	781,192	14,739	17,048	22,212	24,617	27,816	...

main line in cases in which separate statistics have not been maintained.

railway from the 1st January 1901.

Appendix 21.
Vehicle mileage.

APPEN
(Appendix

Loaded and empty vehicle mileage
(Referred to

Number.		Railways.	GOODS.															FOREIGN		
			HOME VEHICLE MILEAGE ON HOME LINE.																	
			1899.			1900.			1901.			1902.			1903.			1899.		
Main head.	Sub-head.		Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
		5′ 6″ gauge.*																		
1	(a)	Bengal Central .	1,491	1,177	2,668	2,484	1,738	4,222	2,073	1,426	3,499	1,763	973	2,736	2,374	1,594	3,968	208	146	354
2	(a)	Bengal-Nagpur † .	29,310	16,011	29,321	27,069	16,447	43,516	30,244	15,809	46,053	34,569	16,129	50,698	35,064	16,176	51,240	6,454	4,453	10,907
3	(a) to (f)	Bombay, Baroda and Central India.	43,228	16,897	60,125	45,290	25,126	70,416	35,554	10,828	46,382	30,934	7,631	38,565	33,101	9,545	42,646	2,671	1,124	3,795
4	(a)	Eastern Bengal State.	19,705	8,417	28,122	21,345	10,032	31,377	19,579	6,966	25,544	22,478	7,643	30,121	20,597	8,154	28,751	835	835	1,670
		East Coast† . .	8,482	3,604	12,176	13,013	7,436	20,449	...	...	...	...	...	...	...	...	...	1,672	1,543	3,215
5	(a) to (d)	East Indian . .	160,487	63,232	223,719	160,359	73,571	233,930	1 61,132	72,467	233,599	179,396	77,790	257,186	167,353	81,037	248,390	20,668	17,685	38,353
6	(a)	Great Indian Peninsula.	67,295	26,450	93,745	69,382	28,244	97,626	113,483	47,903	161,386	124,603	31,441	156,044	127,166	30,363	157,529	22,086	19,097	41,183
6	(b) to (e)	Indian Midland‡ .	13,901	7,906	21,807	18,766	12,027	30,793	...	...	...	...	...	...	...	...	...	7,126	6,154	13,280
7	(a) to (e)	Madras . . .	24,735	7,652	32,387	23,490	6,973	30,463	35,530	11,658	47,188	38,322	11,385	49,707	39,763	11,363	50,126	1,161	1,153	2,314
8	(a) & (b)	Nizam's Guaranteed State.	7,021	3,177	10,198	8,410	4,378	12,788	4,722	3,709	8,431	5,534	3,638	9,172	5,686	3,702	9,388	5,343	4,123	9,466
9	(a) to (e)	North Western State.	108,353	41,459	149,812	87,822	23,754	111,576	124,682	53,296	178,178	126,223	44,842	171,065	150,371	61,690	212,061	2,934	2,745	5,679
10	(a) & (b)	Oudh and Rohilkhand State.	25,535	9,230	34,765	24,832	7,760	32,592	29,235	8,409	37,644	29,639	9,138	38,777	31,168	9,318	40,486	3,690	2,922	6,612
		3′ 3½″ gauge.																		
11	(a) & (b)	Assam-Bengal .	9,861	3,594	13,455	6,927	3,514	10,441	5,317	2,723	8,040	5,492	3,441	8,933	6,495	3,252	9,747	...	...	...
12	(a) to (c)	Bengal and North-Western.	25,340	14,411	39,751	26,221	16,159	42,380	30,903	14,475	45,378	33,211	12,274	45,485	41,090	14,651	55,741	378	271	649
14	(a) to (d)	Bhavnagar-Gondal-Junagad-Porbandar.	4,908	2,326	7,234	5,597	3,653	9,250	3,890	1,484	5,374	3,527	1,740	5,267	3,876	1,765	5,641	47	54	101
5	(a)	Burma . . .	31,612	13,015	44,627	37,037	15,115	52,152	38,644	14,502	53,146	37,575	16,363	53,938	40,115	16,528	56,643	...	...	...
16	(a)	Deoghur . .	...	...	...	...	..	...	...	...	...	8	...	8	...	...	...	...	...	...
4	(b) to (d)	Eastern Bengal State.	23,274	7,059	30,333	22,309	7,390	29,699	21,776	5,161	26,937	25,925	5931	31,856	27,548	5,823	33,371	...	...	...
8	(c)	Hyderabad-Godavari Valley.	...	...	...	4,057	1,941	5,998	6,695	2,213	8,908	5,897	2,579	8,476	5,832	2,572	8,404	...	...	...
18	(a) to (c)	Jodhpur-Bikaner .	1,796	691	2,487	2,356	1,242	3,598	3,636	1,924	5,560	5,172	2,305	7,477	5,871	2,298	8,169	4,265	2,879	7,144
3	(g) to (l)	Rajputana-Malwa .	100,705	28,526	129,221	118,415	45,138	163,583	103,459	38,546	142,005	89,450	31,561	121,011	73,481	17,947	91,428	6,804	4,101	10,905
19	(a) & (b)	Rohilkund and Kumaon.	4,753	3,221	7,974	4,429	2,840	7,269	4,585	2,356	6,941	4,758	2,602	7,360	4,605	2,530	7,135	376	281	657
20	(a) to (e)	South Indian . .	23,284	7,289	30,573	21,552	6,230	27,782	23,418	7,284	30,702	24,796	7,811	32,607	28,806	9,140	37,946	1,097	1,007	2,104
21	(a) to (g)	Southern Mahratta	34,065	15,243	49,308	36,924	17,758	54,682	30,843	12,176	43,019	35,967	11,293	47,260	37,272	9,492	46,764	532	267	799
21	(h)	West of India Portuguese.§	...	...	...	...	...	...	168	49	217	...	...	...	...	...	...	...	...	...
22	(a)	Udaipur-Chitor .	112	45	157	127	50	177	115	39	154	105	37	142	134	47	181	233	216	449
		2′ 6″ gauge.																		
2	(b) & (d)	Raipur-Dhamtari .	...	...	...	...	...	...	214	134	348	164	78	242	170	81	251	...	...	...
9	(f) & (g)	Nowshera-Durgai .	...	...	...	...	...	...	236	100	336	395	121	516	875	295	1,170	...	...	...
		TOTAL GOODS .	759,253	294722	1,053,975	788,243	338510	1126,753	829,332	335632	1,164,969	865,908	308746	1174,649	887,313	319,363	1207,176	88,580	71,056	159,636
		TOTAL COACHING AND GOODS.	1251,715	360868	1612,583	1315,787	407823	1723,610	1404,655	409968	1814,623	1473,698	420876	1894,074	1,528,168	488,759	1,961927	99,458	72,689	172,147

* Includes particulars relating to branches worked on different
† Transferred partly to the Bengal-Nagpur railway and partly
‡ Included with the Great Indian Peninsula railway system.
§ Included with the Southern Mahratta railway from 1902.

DIX 21—*concluded.*

21 in Report for 1902.)

in thousands *of miles.*

in paragraph 24 of Report.)

GOODS.

VEHICLE MILEAGE ON HOME LINE.											TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.					HOME VEHICLE MILEAGE ON FOREIGN LINES.					NUMBER.
1900.			1901.			1902.			1903.												
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	1899.	1900.	1901.	1902.	1903.	1899.	1900.	1901.	1902.	1903.	Main head.
153	148	301	242	188	430	208	199	407	168	145	308	3,022	4,523	3,929	3,143	4,276	120	601	534	219	411	1
11,499	9,312	20,811	4,127	2,783	6,910	4,978	2,793	7,771	4,593	2,532	7,128	40,223	64,321	52,963	58,269	58,368	13,936	20,651	25,534	30,903	33,510	2
3,774	2,829	6,603	668	603	1,271	1,619	1,402	3,021	1,051	1,041	2,092	63,920	77,019	47,663	41,586	44,738	3,215	3,089	5,220	5,716	4,521	3
898	898	1,796	918	918	1,836	922	913	1,835	946	931	1,877	29,792	33,173	27,330	31,956	30,638	1,609	1,676	1,727	1,786	1,778	4
2,682	2,213	4,895	...	...	...	...	...	...	...	...	...	15,391	25,344	...	...	...	3,369	3,546	...	...	...	...
28,052	20,608	48,660	35,059	19,786	54,845	28,416	20,766	49,182	33,429	22,366	55,795	262,072	282,590	288,444	306,368	304,185	34,103	43,294	25,726	28,680	31,425	5
23,434	21,070	44,504	24,449	19,796	44,245	33,474	28,254	61,728	31,994	26,297	58,291	134,928	142,130	205,631	217,772	215,820	16,495	19,394	16,357	15,662	12,607	6
11,098	7,382	18,480	...	...	...	...	...	...	...	...	...	35,067	49,273	...	...	...	12,668	11,469	...	...	...	6
2,075	2,060	4,135	7,013	6,871	13,884	3,954	3,549	7,503	4,849	4,752	9,601	34,701	34,598	61,072	57,210	59,727	3,150	2,717	5,131	8,068	8,706	7
7,396	6,315	13,711	4,810	3,163	7,973	5,099	3,596	8,695	4,636	2,818	7,454	19,664	26,499	16,404	17,867	16,842	6,476	7,383	9,305	8,512	9,309	8
2,778	2,580	5,358	2,853	2,503	5,356	3,967	3,470	7,437	4,189	3,390	7,579	155,491	116,934	183,534	178,562	219,640	12,556	7,575	14,806	12,588	8,016	9
4,348	2,671	7,019	6,770	3,807	10,577	7,767	3,572	11,339	5,770	3,777	9,547	41,377	39,611	48,221	50,116	50,033	29,581	26,501	35,804	43,385	32,462	10
...	...	...	...	...	...	...	...	...	107	108	215	13,445	10,441	8,040	8,033	9,962	...	...	...	...	108	11
450	225	675	613	506	1,119	897	576	1,473	1,513	1,082	2,595	40,400	43,055	46,497	46,958	58,336	7,479	7,584	9,376	9,019	5,985	12
44	46	90	44	47	91	55	62	117	321	225	546	7,335	9,340	5,465	5,384	6,187	3	...	...	17	281	14
...	...	...	...	...	...	...	...	...	...	...	...	44,627	52,152	53,146	53,988	56,643	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	16
...	...	...	422	421	843	860	836	1,696	1,001	956	1,957	30,333	29,699	27,780	33,552	35,328	221	366	364	433	541	4
...	...	...	...	...	...	...	...	...	...	...	...	...	5,998	8,908	8,476	8,404	...	...	...	...	...	6
3,377	2,261	5,638	2,316	1,207	3,523	2,437	1,520	3,957	2,553	1,768	4,321	9,631	9,236	9,083	11,434	12,490	994	972	1,525	1,897	2,392	18
6,333	4,884	11,217	3,868	1,750	5,618	6,894	4,396	11,290	3,721	2,405	6,126	140,136	174,800	147,618	132,301	97,554	6,801	6,125	4,768	4,671	5,814	3
367	177	544	316	164	480	359	207	566	212	139	351	8,631	7,813	7,421	7,926	7,486	2,961	2,835	2,171	2,471	1,231	19
40	38	78	85	81	166	420	392	812	853	728	1,581	32,677	27,860	30,868	33,419	39,527	462	300	235	586	325	20
492	277	769	430	267	697	336	250	586	208	121	324	50,107	55,451	43,716	47,846	47,088	3,443	473	762	815	1,582	21
...	...	...	474	87	561	...	...	...	...	...	...	...	...	778	...	...	...	...	...	...	...	21
495	469	964	228	222	450	211	198	409	93	85	178	606	1,141	601	551	350	116	105	101	55	251	22
...	...	...	...	...	...	...	...	...	...	...	...	...	...	348	242	251	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	336	516	1,170	...	...	...	...	...	9
109,785	86,463	196,248	95,700	65,170	160,870	102,873	76,951	179,824	102191	75,675	177866	1,213,611	1,323,001	1,325,839	1,354,473	1,385,642	165,247	171,682	153,745	175483	160654	
122,396	89,012	211,408	114,184	67,866	182,050	122,984	80,380	203,364	125022	79,285	204307	1,784,730	1,935,018	1,996,673	2,087,438	2,166,234	179,986	188,730	174,957	200100	188470	

gauges to the main line in cases in which separate statistics have not been maintained.
to the Madras railway from the 1st January 1901.
from 1901.

Appendix 22.
Rolling-stock.

APPEN
(Appendix 34 in Re

Rolling-stock under different heads on each

(Referred to in paragraph

N.B.—A reference to Appendix 1 will furnish the key to the

Items.	GAUGE.	5′ 6″											3′ 3⅜″					
	NUMBER.	1	2 (a).	3 (a) to (f).	4 (a).	5 (a) to (d).	6 (a).	6 (b) to (e).	7 (a) to (c).	8 (a) & (b).	9 (a) to (e).	10 (a) & (b).	11 (a) & (b).	12 (a) to (c).	13 (a) & (b).	14 (a) to (d).	15	16	17 (a) & (b)
	Railway.	B.C.	B. N.	B. B. & C.I.	E. B.	E. I.	G. I. P.	I. M.	M.	N. G. S.	N. W.	O. & R.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D.S.
	Engines.																		
1	Passenger engines	*	51	84	51	144	179	49	46	4	*	48	*	20	*	*	*	*	*
2	Goods and mixed engines	27	162	127	88	757	431	144	203	57	700	145	63	205	10	37	236	4	22
3	TOTAL ENGINES	27	213	†211	139	901	610	193	249	61	¶700	193	63	225	10	37	236	4	22
	Coaching vehicles.																		
4	Saloons, Royal and State	...	...	...	...	4	...	...	2	14	11	...	2	3	...	8	1	...	...
5	Saloons, ordinary	4	1	13	13	2	...	2	...	...	...	...	...	13	2	2	17	...	...
6	Reserved carriages	...	15	9	2	39	...	5	13	5	63	16	...	4	1	7	29	...	...
7	Inspection carriages	1	...	...	...	...	...	1	3	...	...	1	8	...	1	...	...	...	...
8	Family carriages	...	...	...	...	...	...	8	3	2	...	2	...	...	...	5	...	...	...
9	First class carriages { 4-wheeled	4	26	4	11	97	71	22	38	10	82	40	1	9	3	8	27	...	...
	First class carriages { Bogie	...	...	1	...	2	2	...	...	...	...	...	3	27	...	1	...	...	...
10	Composite, first and second class. { 4-wheeled	8	48	12	42	64	54	34	65	12	105	56	4	28	6	2	38	...	9
	Composite, first and second class. { Bogie	...	...	22	8	11	17	...	...	...	24	10	11	5	...	5	11	...	...
11	Composite, first, second and third class. { 4-wheeled	...	...	...	...	...	...	2	...	...	...	4	...	...	...	...	...	...	...
	Composite, first, second and third class. { Bogie	...	...	...	...	...	12	5	8	...	11	...	12	...	...	...	28	...	...
12	Other composite carriages	...	5	1	19	10	...	...	...	...	10	...	...	...	...	3	5	2	...
13	Second class { Bogie	...	...	9	12	...	1	...	...	...	...	...	...	...	...	2	...	...	...
	Second class { Ordinary	4	29	26	...	87	128	22	79	10	98	33	...	33	2	10	31	...	...
14	Second class with postal accommodation	...	...	...	...	...	22	...	...	...	...	...	...	...	...	5	...	...	...
15	Intermediate class { 4-wheeled	4	26	15	21	93	...	...	4	...	120	39	...	24	...	10	...	...	...
	Intermediate class { Ambulance	...	...	...	16	...	...	...	...	...	...	...	61	...	...	...	...	...	...
	Intermediate class { Bogie	...	...	12	3	...	...	...	...	...	...	...	...	...	...	2	...	...	...
16	Composite, intermediate and third class	6	15	...	33	63	...	...	...	...	59	31	††10	54	1	...	...	...	...
17	Intermediate and postal carriages	2	3	5	3	...	...	...	...	...	18	...	...	...	2	...	...	...	...
18	Intermediate, third and postal carriages	1	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...
19	Lower class	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...
20	Third class carriages without brakes. { 4-wheeled	34	296	152	168	729	450	192	499	64	79	47	...	215	34	125	245	...	35
	Third class carriages without brakes. { Bogie	...	50	76	23	56	29	...	9	...	...	...	...	6	...	12	107	...	...
	Third class carriages without brakes. { Ambulance	...	23	15	...	92	19	...	51	...	174	...	...	277	...	...	59	...	...
21	Third class and postal vans	...	14	12	3	51	...	17	12	5	42	33	12	16	...	4	26	...	...
22	Third class carriages with brakes. { 4-wheeled and Bogie	12	62	30	...	48	121	27	8	...	369	31	19	...	...	...	45	...	...
	Third class carriages with brakes. { Ambulance	...	...	...	...	...	...	22	...	...	263	207	...	...	...	...	...	...	...
23	Brakevans	10	227	172	73	688	537	73	256	49	452	159	11	178	15	41	165	2	20
24	Brakevans with third class	...	19	...	13	...	...	21	10	...	101	...	...	...	...	...	32	...	...
25	Brakevans fitted with postal compartment	...	...	...	...	...	...	11	...	...	12	...	...	...	...	...	...	...	6
26	Postal vans	...	...	...	3	22	9	...	9	...	10	...	...	...	...	...	5	...	...
27	Composite, postal and other carriages	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
28	Prison vans	...	...	...	...	...	6	2	...	...	...	...	...	...	...	...	3	...	...
29	Carriage trucks	...	4	4	6	39	50	5	27	2	42	...	...	5	...	6	1	...	...
30	Horse boxes	3	16	18	17	75	93	15	56	10	142	43	16	30	1	5	37	...	3
31	Luggage vans	4	31	26	23	41	90	25	30	6	61	43	12	1	...	1	31	...	4
32	Produce Vendors' vans	...	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Milk vans	6	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Fish vans	8	...	...	20	...	...	...	...	...	...	...	3	...	...	...	...	...	2
35	Store, ice and stationery vans	...	...	...	...	1	...	...	...	...	16	2	...	...	...	...	...	...	...
36	Miscellaneous	8	...	...	5	9	...	...	...	...	1	3	1	3	2	...	15	...	2
37	TOTAL COACHING VEHICLES	119	911	634	571	2,323	1,713	511	1,182	189	2,365	850	216	926	73	264	958	12	81
	Goods vehicles.																		
38	Covered goods wagons, bogies. { Ordinary	421	...	...	250	...	...	...	...	...	...	...	100	200	...	...	579	...	...
	Covered goods wagons, bogies. { Military	...	...	...	...	...	...	...	...	...	412	...	...	...	...	...	75	...	...
39	Covered goods wagons, 4-wheeled. { Ordinary	...	2,468	1,554	1,356	3,218	4,470	2,210	646	46	2,365	2,177	993	4,786	244	153	1,834	4	133
	Covered goods wagons, 4-wheeled. { Military	...	1,278	‡1,689	1,071	3,051	...	...	2,026	115	5,227	2,611	...	...	...	145	335	...	...
40	High-sided wagons, bogie	...	...	...	...	...	50	...	...	10	...	...	...	...	...	...	16	...	...
41	High-sided wagons, 4 wheeled	12	...	1,003	18	...	2,767	691	1,260	604	938	...	125	...	...	...	60	...	644
42	Medium sided wagons, bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	Medium sided wagons, 4-wheeled	...	350	435	...	...	...	...	...	121	...	...	...	...	...	...	310	...	...
44	Low-sided wagons, bogie. { Ordinary	...	...	102	...	...	...	...	...	...	102	...	...	28	...	20	95	...	...
	Low-sided wagons, bogie. { Military	...	...	70	...	...	...	...	...	...	140	...	...	...	...	...	...	...	...
45	Low-sided wagons, 4-wheeled. { Ordinary	42	190	35	...	4,918	280	25	150	...	538	189	300	544	68	565	...	4	70
	Low-sided wagons, 4-wheeled. { Military	8	156	...	167	1,956	...	...	229	...	1,199	328	...	...	...	...	286	...	...
46	Coal or coke wagons	...	1,259	***100	...	858	...	...	130	...	...	110	5	...	...	...	...	...	...
47	Cattle wagons	...	...	...	5	7	...	...	42	...	24	...	7	...	1	6	151	...	...
48	Accident vans	2	8	14	11	26	27	10	15	...	...	...	3	...	...	...	13	...	...
49	Platform wagons	...	38	...	...	43	...	...	3	...	...	...	24	2	...	...	...	...	...
50	Powder vans	2	6	6	11	31	18	4	9	...	47	8	3	1	...	2	12	...	1
51	Timber trucks	8	36	20	25	...	191	...	¶¶255	10	49	...	55	279	12	22	43	...	50
52	Bolster trucks { Double	...	...	...	...	...	...	...	...	...	271	...	...	...	...	...	157	...	...
	Bolster trucks { Single	...	14	...	58	...	...	50	...	...	...	...	16	...	...	...	150	...	...
53	Ballast wagons	...	76	478	37	248	...	91	...	60	...	...	50	...	...	74	103	...	...
54	Travelling oil tanks	...	16	19	21	35	28	...	25	...	51	...	...	...	...	2	1	...	...
55	Travelling water tanks	...	...	21	3	...	...	11	10	3	72	8	...	...	...	1	13	...	...
56	Travelling gas holder	...	8	8	2	3	10	4	10	2	15	6	6	...	...	...	...	...	...
57	Travelling cranes	2	11	4	5	29	47	10	15	2	52	17	17	19	3	2	27	...	1
58	Miscellaneous	...	28	10	10	40	...	...	16	7	16	7	7	9	...	56	128	...	...
59	TOTAL GOODS VEHICLES	497	6,442	5,018	3,046	16,463	7,888	3,106	4,841	980	11,518	5,461	1,711	5,868	328	1,048	4,388	8	899
	LOWER CLASS CARRIAGES FITTED WITH RETIRING																		
	Intermediate class	4	35	16	13	§82	...	...	...	...	120	25	...	...	‖‖3	12	...	...	...
	Third class	5	40	26	43	§&‖ 105	112	54	63	53	**316	113	16	...	...	14	38	...	...
	TOTAL	9	75	42	56	187	112	54	63	53	436	138	16	...	3	26	38	...	...

* Included with goods engines as no distinction is made in the line returns between Passenger and Goods and Mixed engines.
† Excludes 3 Passenger and 4 Goods engines condemned during the year.
‡ Includes 150 salt wagons.
§ Nine bogie composites, intermediate and third, taken as 9 of each class.
‖ Includes 2 composites, intermediate and third.
¶ Excluding 4 engines on 3′ 3⅜″ gauge.

DIX 22.

port for 1902.)

railway at close of the Calendar year 1903.

12 of Report.)

letters used to denote railways.

Appendix 22.
Rolling-stock.

3′ 3½″									2′ 6″														2′ 0″						Items.
4 (b) to (d).	8 (c).	18 (a) to (c).	7 (d) &(e)	3 (g) to (l).	19 (a) & (b).	20 (a) & (e).	21 (a) to (h).	22	24	25	4 (e)	4 (c).	3 (m) & (n)	2 (b) & (d).	28	9(f) & (g).	30	2 (c)	19 (c)	31	33	34	9 (h)	36	6 (f)	37	38	39	
E. B. S.	H. G. V.	J. B.	N. & S.C.	R. M.	R. & K.	S. I.	S. M.	U. C.	B. L.	B. B.	C. B.	E. B. S.	G. D.& R.	J.G. E. & R.D	K. S.	KK T.& N.D	M. E. W.	F. L. L.	P. W. L.	E. K. L.	B. P.	T. B.	D.L.	D. H.	G. L.	H. A.	H. S.	J.	
51	*	*	4	145	*	73	30	1	*	*	*	*	*	*	*	*	5	*	*	*	*	*	*	*	*	*	*	*	1
74	55	48	5	287	41	145	208	2	5	3	3	10	13	16	12	28	2	3	5	2	4	3	7	16	11	7	4	7	2
125	55	48	9	432	41	218	238	3	5	3	3	10	13	16	12	28	7	3	5	2	4	3	7	16	11	7	4	7	3
2	3	3	1	5	...	1	8	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...	4
19	...	...	...	1	...	3	...	...	1	...	1	1	2	...	...	...	3	...	...	...	...	...	...	2	2	...	...	...	5
...	8	...	...	...	4	...	11	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	6
...	...	5	...	11	2	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	7
...	...	3	...	...	...	3	...	1	...	...	...	...	...	...	4	2	...	...	...	...	...	...	...	...	...	...	...	...	8
14	8	4	...	101	6	19	44	...	...	...	...	...	...	...	12	2	...	...	...	...	...	...	...	12	2	...	...	...	9
2	...	...	2	...	3	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	4	...	...	...	2	
54	11	20	1	45	8	41	54	3	...	1	...	...	...	2	...	2	...	...	3	...	2	...	...	...	...	...	...	...	10
2	2	...	2	20	...	24	12	...	...	...	2	4	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	2	...	5	...	4	2	2	12
...	...	2	...	1	...	9	8	...	4	1	2	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	13
16	10	6	...	89	6	36	43	1	...	...	...	...	...	...	16	...	4	...	...	...	...	...	...	29	1	...	...	...	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	
44	...	...	...	49	3	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
40	...	...	...	25	10	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	2	...	16
3	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	2	...	...	...	32	...	...	...	...	3	...	...	6	...	...	...	...	...	...	10	19
231	65	69	...	549	49	525	198	11	...	15	...	...	...	14	...	32	15	...	10	9	15	...	...	...	10	40	14	...	20
18	3	15	16	188	10	...	58	...	...	...	6	11	...	9	...	6	18	...	...	...	...	...	...	34	8	...	...	...	
...	...	...	...	5	...	15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
8	4	10	...	24	2	12	37	1	...	1	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	21
7	...	...	...	118	15	100	256	...	...	...	...	...	...	3	24	...	...	...	4	...	...	...	12	...	2	...	...	...	22
...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
101	40	32	14	302	21	57	45	...	...	...	...	7	11	3	...	12	7	3	...	3	3	...	...	...	...	7	1	...	23
...	...	...	...	...	...	28	180	3	...	3	2	2	...	3	18	1	...	...	...	...	1	...	...	...	2	2	1	...	24
...	...	...	...	...	21	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	3	...	...	...	...	...	...	...	25
3	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	4	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	27
1	...	...	...	5	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
5	...	...	3	38	...	5	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
10	10	12	3	82	5	30	47	1	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	5	...	...	...	30
15	...	...	...	24	6	81	22	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
11	...	4	...	1	2	7	12	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	36
632	164	185	44	1,691	173	1,014	1,058	26	7	23	16	33	54	34	74	64	54	8	18	14	25	13	12	91	40	56	26	19	37
...	...	6	75	471	200	75	85	25	7	...	56	47	...	120	...	49	10	2	1	...	...	...	...	...	...	...	...	42	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1,564	300	556	...	3,536	766	1,613	2,988	...	...	10	...	...	38	20	15	25	10	...	57	...	20	30	...	37	65	14	4	...	39
1,131	100	...	...	409	...	267	193	...	...	...	...	...	...	...	...	13	7	...	...	...	...	...	...	...	...	...	...	24	40
...	2	...	43	...	...	...	57	...	...	...	...	...	...	...	...	13	7	...	...	...	...	...	...	...	...	...	...		
...	300	...	...	134	...	813	170	...	5	...	...	...	73	...	...	19	...	...	...	...	12	...	...	152	41	4	4	...	41
...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	42
...	...	...	...	150	...	...	140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43
54	...	150	...	227	...	20	...	...	...	2	...	...	96	50	...	...	40	12	...	...	...	...	...	11	19	19	...	3	44
...	...	...	7	953	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
289	...	145	...	21	75	...	448	10	39	8	9	26	...	...	60	...	...	2	3	4	15	6	...	...	...	4	...	...	45
228	...	...	...	1,192	...	...	28	...	...	...	...	...	...	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	350	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	§§326	...	...	...	...	...	46
...	...	35	...	...	...	6	28	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	47
7	...	...	...	15	4	...	13	...	...	...	...	...	...	30	...	...	...	...	...	...	...	...	...	...	1	...	...	...	48
3	...	1	...	...	...	4	45	...	...	...	...	3	...	...	...	7	...	...	...	...	2	...	...	...	...	...	...	...	49
2	...	1	...	35	2	7	13	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	50
84	20	...	8	79	76	33	127	...	...	...	...	2	...	...	...	...	...	...	2	...	...	...	...	4	...	...	...	††5	51
...	...	...	...	...	...	18	30	...	...	...	...	‡‡110	...	...	...	...	...	...	...	...	...	...	...	††2	...	...	...	...	52
†† 59	...	...	...	...	...	...	65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	84	...	...	...	...	461	...	...	10	...	...	...	...	...	...	52	...	...	...	...	...	...	...	...	100	...	...	...	53
2	...	...	...	18	...	20	8	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	54
...	1	...	...	...	...	23	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55
3	2	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56
13	2	...	...	29	8	6	21	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	57
6	5	...	...	1	...	15	20	...	...	...	...	...	2	...	...	...	...	...	8	...	...	...	...	6	...	...	...	...	58
3,445	816	893	189	7,270	1,131	3,381	4,861	35	62	20	65	196	209	250	75	167	68	16	71	4	35	50	326	212	219	32	8	75	59
ACCOMMODATION FOR FEMALES.																													
44	...	...	...	79	10	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
221	63	25	...	145	3	82	63	15	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
265	63	25	...	224	13	82	63	17	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

* Includes 13 bogie and 45 composites, intermediate and third class. †† Rail trucks. ‡‡ These are wooden trucks for carrying stone.

§§ Trucks for carrying coal. |||| These are intermediate and third class composites. ¶¶ Includes 70 rail trucks.

*** Borne on the rolling stock list of the Rajputana-Malwa railway †††† Intermediate and brakevans.

Appendix 23.
Rolling-stock statistics.

APPEN

(Appendix 33 in

Number of, outlay on, and

(Referred to in paragraphs

N.B.—A reference to Appendix 1 will furnish the key

Progressive No.		GAUGE.	5'6"						
		NUMBER.	1	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (e)	7 (a) to (c)
		Particulars.	B. C.	B. N.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.
		ENGINES.							
1	Passenger engines	Number at close of 1902	*	40	63	46	140	170	42
2		Number added in 1903	*	11	21	5	4	58	4
3		Number at close of 1903	*	51	84	51	144	228	46
4	Goods and mixed engines.	Number at close of 1902	27†	153	120	83	714	607	207
5		Number added in 1903	...	9	7	5	43	—32	—4
6		Number at close of 1903	27†	162	127	88	757	575	203
7	Total number of locomotives on the 31st December		27	213	211	139	901	803	249
8	Number per mile of line open of all classes		0·19	0·13	0·25	0·50	0·41	0·30	0·18
9	Average mileage run by each per *annum*.	Passenger	*	29,761	20,005	25,136	33,916	27,763	34,387
10		Goods	*	22,967	14,051	20,551	20,682	19,106	20,300
11		All classes	21,442	24,594	16,421	22,233	22,797	21,580	22,715
12	Average mileage run by each *per diem*.	Passenger	*	82	55	69	93	76	94
13		Goods	*	63	38	56	57	52	56
14		All classes	59	67	45	61	62	59	62
15	Ton mileage hauled per engine, in thousands of tons		3,701	7,031	5,338	5,247	7,838	6,236	5,661
16	Average under repairs or renewals at any one time		3	28	33	16	139	161	58
17	Total value, in thousands of rupees		8,64	*	73,99	*	1,65,78	2,66,77	93,18
18	Total value per mile of line open		6,915	*	8,885	*	7,541	9,948	6,636
		COACHING STOCK.							
19	Number at close of 1902		117	888	618	548	2,316	2,233	1,181
20	Number added in 1903		2	23	16	23	7	—9	1
21	Number at close of 1903		119	911	634	571	2,323	2,224	1,182
22	Number per mile of line open.	1st class	0·09	0·04	0·05	0·18	0·08	0·06	0·07
23		2nd class	0·07	0·03	0·07	0·13	0·06	0·08	0·08
24		Intermediate class	0·05	0·02	0·04	0·25	0·06	...	...
25		3rd class	0·32	0·26	0·34	0·90	0·44	0·32	0·41
26		All other classes	0·39	0·19	0·26	0·59	0·40	0·37	0·28
27		Total of all classes	0·96	0·54	0·76	2·05	1·04	0·83	0·84
28	Average mileage run by each per *annum*.	1st class	17,932	39,510	*	23,734	66,514	*	33,493
29		2nd class	32,702	45,279	*	31,444	77,461	*	28,804
30		Intermediate class	49,067	69,000	*	35,050	76,174	*	88,246
31		3rd class	45,929	42,241	*	33,349	61,076	*	35,200
32		All other classes	20,850	34,409	*	25,442	33,134	*	29,069
33		Total of all classes	32,154	40,496	46,288	30,546	52,390	45,097	32,616
34	Average mileage run by each per *diem*		88	111	127	88	144	124	89
35	Freight ton mileage per vehicle, in thousands of tons		25	30	47	26	46	32	28
36	Average under repairs or renewals at any one time		50	76	80	82	521	266	124
37	Total value, in thousands of rupees		*	*	37,08	*	*	1,04,15	43,86
38	Total value per mile of line open		*	*	4,452	*	*	3,882	3,124
		GOODS STOCK.							
39	Number at close of 1902.	Covered wagons	420	3,772	2,587	2,018	8,313	6,319	2,396
40		Open ,,	12	2,229	1,670	226	8,026	3,835	1,789
41		Timber trucks, including bolster trucks	57	53	90	68	...	241	185
42		All other classes	6	57	558	68	81	160	52
43		Total of all classes	495	6,111	4,905	2,380	16,420	10,555	4,422
44	Number added in 1903.	Covered wagons	1	4	56	665	6	361	352
45		Open ,,	...	330	125	—4	2	69	53
46		Timber trucks, including bolster trucks	1	—3	—70	—1	...	...	...
47		All other classes	...	...	2	6	35	9	14
48		Total of all classes	2	331	113	666	43	439	419
49	Number at close of 1903.	Covered wagons	421	3,776	2,643	2,683	8,319	6,680	2,748
50		Open ,,	12	2,559	1,795	222	8,028	3,904	1,842
51		Timber trucks, including bolster trucks	58	50	20	67	...	241	185
52		All other classes	6	57	560	74	116	169	66
53		Total of all classes	497	6,442	5,018	3,046	16,463	10,994	4,841
54	Number of all classes per mile of line open		3·98	3·82	6·91	10·93	7·35	4·10	3·45
55	Average mileage run by each per *annum*		8,771	13,108	9,591	10,023	‡16,668	15,475	11,852
56	Average mileage run by each per *diem*		24	36	26	22	47	42	32
57	Average tare in tons.	Covered wagons	7·85	8·23	6·78	7·60	7·11	7·49	7·32
58		Open ,,	7·65	7·81	6·19	6·60	6·45	6·56	6·37
59	Average carrying capacity in tons.	Covered wagons	12·39	14·95	14·35	12·42	14·85	14·03	13·46
60		Open ,,	17·00	15·85	13·79	14·15	14·13	14·08	13·55
61	Average load of a goods vehicle, loaded and empty, per mile		8·65	6·18	6·44	5·02	7·38	5·67	4·81
62	Freight ton mileage per vehicle, in thousands of tons.		32	56	59	50	‡136	111	59
63	Average under repairs or renewals at any one time		143	171	253	172	680	687	227
64	Total value, in thousands of rupees		19,67	*	1,04,88	*	*	2,36,92	1,34,06
65	Total value per mile of line open		15,735	*	12,595	*	*	8,831	9,549
66	Grand total value of rolling-stock, in thousands of rupees		28,31	3,34,43	2,15,95	1,57,31	11,35,30	6,07,84	§2,71,10
67	Grand total value of rolling-stock per mile of line open		22,650	19,877	25,932	56,448	51,651	22,656	19,309
		ROLLING-STOCK UNDER SUPPLY.							
68	Engines		...	19	4	7	92	6	8
69	Coaching vehicles		...	62	12	24	196	23	85
70	Goods vehicles		...	937	87	310	1,048	404	77

* Information not available. † Including passenger engines. ‡ Calculated on total goods stock excluding 115 vehicles intended for railway purposes only.

DIX 23.

Report for 1902.)

work done by Rolling-stock.

12 and 13 of Report.)

to the letters used to denote railway systems.

			3′ 3¾″												
8 (a) & (b)	9 (a) to (e)	10 (a) & (b)	11 (a) & (b)	12 (a) to (c)	13 (a) & (b)	14 (a) to (d)	15	16	17 (a) & (b)	4 (b) to (d)	8 (c)	18 (a) to (c)	7 (d) & (e)	3 (g) to (i)	Progressive No.
N. G. S.	N. W.	O. & B.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. G. V.	J. B.	N. & S. C.	R. M.	
ENGINES.															
4	*	42	*	7	*	*	28	*	*	*	*	*	4	145	1
...	*	6	*	13	*	*	...	*	*	*	*	*	...	...	2
4	*	48	*	20	*	*	28	*	*	*	*	*	4	145	3
54	694†	139	53†	175	10†	37†	181	4†	22†	110†	54†	44†	5	293	4
3	6	6	10	30	...	...	27	...	...	15	1	4	...	6	5
57	700†	145	63†	205	10†	37†	208	4†	22†	125†	55†	48†	5	287	6
61	700	193	63	225	10	37	236	4	22	125	55	48	9	432	7
0·17	0·19	0·17	0·09	0·17	0·07	0·08	0·18	0·83	0·28	0·18	0·14	0·01	0·11	0·28	8
22,079	*	53,133	*	23,563	*	*	29,668	*	*	29,169	*	*	8,343	19,651	9
18,941	*	17,931	*	21,150	*	*	21,295	*	*	18,683	*	*	26,700	13,727	10
19,147	23,981	26,686	16,995	21,364	22,749	15,338	22,289	3,640	13,759	22,961	...	21,090	18,541	15,715	11
60	*	146	*	65	*	*	51	*	*	86	*	*	23	54	12
52	*	49	*	58	*	*	58	*	*	51	*	*	73	38	13
52	66	73	47	59	62	42	61	10	38	63	...	58	51	43	14
6,175	7,156	7,050	2,385	3,962	*	2,459	3,687		*	¶3,417	2,762	3,913	2,711	3,107	15
13	*	24	12	29	...	1	28	1	4	20	9	6	1	57	16
24,20	2,46,44	*	14,15	62,43	2,70	7,56	65,49	*	*	*	16,63	13,29	1,84	79,98	17
6,822	6,584	*	2,198	4,631	1,765	1,661	4,899	*	*	*	4,250	1,685	2,247	4,248	18
COACHING STOCK.															
189	2,350	845	206	838	72	264	860	12	80	607	131	183	42	1,676	19
...	15	5	10	88	1	...	98	...	1	25	33	2	2	15	20
189	2,365	850	216	926	73	264	958	12	81	632	164	185	44	1,691	21
0·10	0·04	0·08	0·04	0·06	0·06	0·07	0·06	0 42	0·07	0·09	0·07	0·08	0·07	0·08	22
0·05	0·04	0 05	0·02	0·04	0·03	0·04	0·07	...	0·04	0·07	0·04	0·02	0·02	0·07	23
...	0·04	0·05	0·01	0·03	0·02	0·03	...	...	...	0·10	...	...	...	0·03	24
0·19	0·25	0·32	0·13	0·41	0·24	0·31	0·38	2·09	0·45	0·40	0·18	0·11	0·20	0·47	25
0·19	0 25	0·22	0·13	0·16	0·13	0·13	0·21	...	0·46	0·25	0·13	0·06	0 25	0·25	26
0·53	0·63	0·72	0·33	0·70	0·48	0·58	0·52	2·51	1·04	0·91	0·42	0·22	0·54	0·90	27
*	48,185	4,856	50,996	50,720	*	*	29,477	*	*	*	44,526	34,494	9,989	*	28
*	43,829	3,338	52,223	66,134	*	*	33,606	...	*	*	36,436	41,920	22,126	*	29
*	56,530	2,782	1,18,008	88,489	*	*	...	...	...	*	...	...	...	*	30
*	57,947	18,917	86,702	56,727	*	*	37,408	*	*	*	44,901	62,690	26,812	*	31
*	23,927	13,100	21,303	40,389	*	*	26,283	...	*	*	37,091	41,377	11,691	*	32
42,701	44,773	42,993	55,311	54,623	*	26,044	33,558	*	*	*	41,379	51,297	17,623	36,038	33
117	123	118	152	150	*	71	92	*	*	*	113	141	48	99	34
26	26	32	21	31	*	16	26	*	*	¶21	26	31	24	25	35
23	333	132	28	61	1	26	107	1	12	93	10	9	...	79	36
*	1,45,65	*	16,86	*	*	8,90	50,90	*	*	*	8,48	*	*	*	37
*	3,389	*	2,619	*	*	1,954	3,807	*	*	*	2,166	*	*	*	38
GOODS STOCK.															
162	8,004	4,083	859	5,508	231	293	2,786	4	133	2,495	400	538	75	4,254	39
745	2,917	...	468		67	662	906	4	714	361	386	295	56	2,675	40
28	321	610	76	329	12	22	350	...	50	84	20	...	8	79	41
73	285	45	77	31	4	23	259	...	2	69	10	...	...	92	42
1,008	11,477	4,738	1,430	5,868	317	1,005	4,301	8	899	2,949	816	533	139	7,106	43
—1	...	705	244	50	10	...	37	...	...	260	...	24	...	162	44
—10	...	...	—14		1	43	115	...	...	197	...	...	...	2	45
—18	—1	17	—5	—50	...	...	...	...	...	...	...	...	...	...	46
1	42	1	6	...	...	...	—65	...	...	39	...	36	...	6	47
—28	41	723	231	...	11	43	87	...	...	496	...	60	...	170	48
161	8,004	4,788	1,103	5,558	244	298	2,823	4	133	2,695	400	562	75	4,416	49
735	2,917	...	454		68	705	1,021	4	714	558	386	295	56	2,677	50
10	320	627	71	279	12	22	350	...	50	84	20	...	8	79	51
74	277	46	83	31	4	23	194	...	2	108	10	36	...	93	52
980	11,518	5,461	1,711	5,868	328	1,048	4,388	8	899	3,445	816	893	139	7,270	53
2·76	3·68	4 57	2·52	4·41	2·14	2 31	3·28	1·67	11·60	4·95	2·08	1 68	1·78	3·86	54
20,543	19,814	13,358	5,767	10,519	*	5,651	10,683	*	*	*	10,427	11,826	6,160	13,376	55
56	58	37	16	29	*	15	29	*	*	*	29	32	17	37	56
7·25	7·54	8·26	4·93	3·71	*	3·72	4·89	3 00	*	4·15	4 38	3·87	8·13	3·93	57
6·95	7·02	...	3·20		*	3·13	3·69	3 00	*	3 31	4·02	4·78	7·93	4·29	58
11·45	14·54	11·98	1·39	8·67	*	6·24	9·54	5·00	*	7·47	10·00	9·39	18·00	9·46	59
16·03	13·47	...	6 54		*	6·60	8 37	5·00	*	7·10	10 04	13 75	19·12	12 37	60
6·29	6·46	5·18	3 61	3·73	*	2·45	3·23	*	*	¶3·15	3·31	3·39	3·20	4·25	61
108	114	47	21	36	*	15	41	*	*	¶31	34	47	19	57	62
102	575	122	97	117	12	19	581	1	26	153	13	12	2	162	63
29.49‖	2,95.74	*	29,33	1,30,15‖	9.28‖	12,53	82,80	*	*	*	13,19	25,11‖	8,47‖	1,56,16‖	64
8,315	7,397	*	4,556	9,656	6,067	2,751	6,193	*	*	*	3,369	3,546	10,360	8,241	65
53,69	6,87,83	2,18,19	60,34	1.92.58	11.98	28,99	1,99,19	*	19,28	1,15,60	38,30	39,00	10,31	2,35,14	66
15,137	18,370	19,254	9,373	14,287	7,835	6,366	14,699	*	24,874	16,626	9,785	4,731	12,607	12,489	67
ROLLING-STOCK UNDER SUPPLY.															
...	59	5	14	...	...	...	14	...	...	8	...	...	7	...	68
...	105	10	52	16	...	...	24	...	...	46	...	20	13	7	69
29	348	80	107	400	...	...	607	...	...	61	...	40	10	841	70

§ Including Rs. 9,15,000, outlay of rolling-stock on lines under construction included in the open line list.

¶ Including 2′ 6″ gauge sections but excluding the Native State section of the Cooch Behar railway.

‖ Including value of coaching stock.

Appendix 23.
Rolling-stock statistics.

Number of, outlay on, and

(Appendix 33

(Referred to in paragraphs

N.B.—A reference to Appendix 1 will furnish the key

Progressive No.	GAUGE.	3′ 3⅜″—*concld.*				2′ 6″				
	CLASSIFICATION NUMBER.	19 (*a*) & (*b*)	20 (*a*) to (*e*)	21 (*a*) to (*h*)	22	24	25	4 (*e*)	4 (*c*)	3 (*m*) & (*n*)
	Particulars.	R. K.	S. I.	S. M.	U. G.	B. L.	B. B.	C. B.	E. B. S.	G. D. & E.
	ENGINES.									
1	Passenger engines. Number at close of 1902	*	69	30	1	*	...	*	*	*
2	Passenger engines. Number added in 1903	*	4	...	...	*	*	*	*	*
3	Passenger engines. Number at close of 1903	*	73	30	1	*	*	*	*	*
4	Goods and mixed engines. Number at close of 1902	31†	145	201	2	4†	...	3†	10†	11†
5	Goods and mixed engines. Number added in 1903	10	...	7	...	1	3	...	...	2
6	Goods and mixed engines. Number at close of 1903	41†	145	208	2	5†	3	3†	10†	13†
7	Total number of locomotives on the 31st December	41	218	238	3	5	3	3	10	13
8	Number per mile of line open of all classes	0·14	0·17	0·14	0·04	0·23	0·16	0·09	0·29	0·10
9	Average mileage run by each per *annum*. Passenger	*	25,516	20,019	*	*	*	*	*	*
10	Average mileage run by each per *annum*. Goods	*	16,172	16,374	*	*	*	*	*	*
11	Average mileage run by each per *annum*. All classes	19,150	19,301	16,833	18,423	3,403	4,687	34,030	9,823	9,892
12	Average mileage run by each per *diem*. Passenger	*	70	55	*	*	*	*	*	*
13	Average mileage run by each per *diem*. Goods	*	44	45	*	*	*	*	*	*
14	Average mileage run by each per *diem*. All classes	52	53	46	50	9	13	93	27	27
15	Ton-mileage hauled per engine, in thousands of tons	2,718	3,215	2,779	3,106	*	*	*	*	*
16	Average under repairs or renewals at any one time	6	41	36	...	1	...	...	2	2
17	Total value, in thousands of rupees	*	4,959	4,883	95	1,27	65	*	*	1,44
18	Total value per mile of line open	*	3,829	2,967	1,384	5,892	3,500	*	*	1,151
	COACHING STOCK.									
19	Number at close of 1902	158	990	1,053	26	7	...	16	33	54
20	Number added in 1903	15	24	...	...	...	23	...	...	...
21	Number at close of 1903	173	1,014	1,053	26	7	23	16	33	54
22	Number per mile of line open. 1st class	0·07	0·06	0·06	0·03	...	...	0·06	0·09	0·06
23	Number per mile of line open. 2nd class	0·03	0·05	0·05	0·03	...	...	0·03	0·06	...
24	Number per mile of line open. Intermediate class	0·03	...	...	0·03	...	...	0·11	0·10	0·10	...
25	Number per mile of line open. 3rd class	0·27	0·51	0·33	0·22	0·09	0·81	0·25	0·40	0·26
26	Number per mile of line open. All other classes	0·19	0·16	0·20	0·06	0·23	0·32	0·04	0·30	0·11
27	Number per mile of line open. Total of all classes	0·59	0·78	0·64	0·37	0·32	1·24	0·48	0·95	0·43
28	Average mileage run by each per *annum*. 1st class	*	32,550	*	*	*	*	*	*	*
29	Average mileage run by each per *annum*. 2nd class	*	37,450	*	*	*	...	*	*	...
30	Average mileage run by each per *annum*. Intermediate class	*	..	...	*	...	*	*	*	...
31	Average mileage run by each per *annum*. 3rd class	*	43,742	*	*	...	*	*	*	*
32	Average mileage run by each per *annum*. All other classes	*	31,105	*	*	*	*	*	*	*
33	Average mileage run by each per *annum*. Total of all classes	34,058	39,674	28,696	28,887	*	*	*	*	*
34	Average mileage run by each per *diem*	93	109	79	79	*	*	*	*	*
35	Freight ton-mileage per vehicle, in thousand of tons	19	36	17	22	*	*	*	*	*
36	Average under repairs or renewals at any one time	24	135	52	1	2	...	2	4	*
37	Total value, in thousands of rupees	*	38,41	*	1,19	*	*	*	*	1,29
38	Total value per mile of line open	*	2,966	*	1,734	*	*	*	*	1,026
	GOODS STOCK.									
39	Number at close of 1902. Covered wagons	898	1,944	3,277	25	7	...	56	55	38
40	Number at close of 1902. Open ,,	82	1,322	1,130	10	15	...	9	18	173
41	Number at close of 1902. Timber trucks, including bolster trucks	76	51	237	...	39	...	...	2	2
42	Number at close of 1902. All other classes	15	6	217	...	1	...	...	121	2
43	Number at close of 1902. Total of all classes	1,071	3,323	4,861	35	62	...	65	196	215
44	Number added in 1903. Covered wagons	68	58	47	...	...	10	...	—8	...
45	Number added in 1903. Open ,,	—7	...	—66	...	...	2	...	16	—4
46	Number added in 1903. Timber trucks, including bolster trucks	...	...	30	...	...	...	...	...	—2
47	Number added in 1903. All other classes	—1	...	—11	...	...	8	...	—8	...
48	Number added in 1903. Total of all classes	60	58	...	...	...	20	...	...	—6
49	Number at close of 1903. Covered wagons	966	2,002	3,324	25	7	10	56	47	38
50	Number at close of 1903. Open ,,	75	1,322	1,064	10	15	2	9	34	169
51	Number at close of 1903. Timber trucks, including bolster trucks	76	51	267	...	39	...	...	2	...
52	Number at close of 1903. All other classes	14	6	206	...	1	8	...	113	2
53	Number at close of 1903. Total of all classes	1,131	3,381	4,861	35	62	20	65	196	209
54	Number of all classes per mile of line open	3·89	2·61	2·95	0·50	2·36	1·08	1·93	2·87	1·67
55	Average mileage run by each per *annum*	7,397	11,397	9,946	17,643	*	*	*	*	*
56	Average mileage run by each per *diem*	20	31	27	48	*	*	*	*	*
57	Average tare in tons. Covered wagons	4·56	4·30	3·82	4·02	5·90	2·75	3·32	2·79	*
58	Average tare in tons. Open ,,	2·74	3·52	3·27	3·22	5·35	2·50	2·15	1·89	*
59	Average carrying capacity in tons. Covered wagons	10·40	7·41	7·60	7·40	14·10	6·00	3·79	4·35	*
60	Average carrying capacity in tons. Open ,,	7·37	6·93	6·95	6·29	14·65	6·00	5·00	4·74	*
61	Average load of a goods vehicle, loaded and empty, per mile	3·73	3·78	3·47	2·12	9·66	*	*	*	*
62	Freight ton-mileage per vehicle, in thousands of tons	25	45	33	22	*	*	*	*	*
63	Average under repairs or renewals at any one time	68	188	124	...	4	3	10	*	
64	Total value, in thousands of rupees	*	48,79	1,00,06‡	58	2,88‡	1,52‡	*	*	1,45
65	Total value per mile of line open	*	3,767	6,078	845	13,388	8,251	*	*	1,158
66	Grand total value of rolling-stock, in thousands of rupees	39,25	1,36,79	1,48,89	2,72	4,15	2,17	1,88	2,01	4,18
67	Grand total value of rolling-stock per mile of line open	13,490	10,562	9,045	3,963	19,230	11,751	5,598	5,790	3,335
	ROLLING-STOCK UNDER SUPPLY.									
68	Engines	...	10	9	3	4	...	...	...	...
69	Coaching vehicles	17	72	...	...	7	...	...	...	...
70	Goods vehicles	85	278	...	...	51	8	...	...	...

* Information not available. † Including passenger engines. ‡ Including value of coaching stock.

DIX 23—*concld.*

work done by Rolling-stock.

in Report for 1902.)
12 and 13 of Report.)
to the letters used to denote railway systems.

2' 6"									2' 0"						Progressive No.
2 (b) & (d)	28	9 (f) & (g)	30	2 (c)	19 (c)	31	33	34	9 (h)	36	6 (f)	37	38	39	
J. G. E. & R. D.	K. S.	K. K. T. & N. D.	M. R. W.	P. L. L.	P. W. L.	R. K. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H. A.	H. S.	J.	
ENGINES.															
*	...	*	5	*	*	*	*	*	*	*	*	*	*	*	1
*	*	*	...	*	*	*	*	*	*	*	*	*	*	*	2
*	*	*	5	*	*	*	*	*	*	*	*	*	*	*	3
4†	...	11†	3	3†	5†	2†	4†	3†	7	14†	11†	7†	4†	7†	4
12	12	17	−1	...	...	...	...	...	...	2	...	...	...	...	5
16†	12	28†	2	3†	5†	2†	4†	3†	7	16†	11†	7†	4†	7†	6
16	12	28	7	3	5	2	4	3	7	16	11	7	4	7	7
0·12	0·20	0·21	0·07	0·12	0·13	0·10	0·12	0·15	1·13	0·31	0·09	0·24	0·20	0·13	8
*	*	*	22,964	*	*	*	*	*	*	*	*	*	*	*	9
*	*	*	16,601	*	*	*	*	*	*	*	*	*	*	*	10
4,149	*	10,686	21,146	6,426	12,337	15,224	22,308	*	*	14,899	8,600	10,650	8,725	*	11
*	14	*	63	*	*	*	*	*	*	*	*	*	*	*	12
*	17	*	46	*	*	*	*	*	*	*	*	*	*	*	13
11	31	29	58	18	34	42	61	*	*	41	24	29	24	*	14
286	*	526	*	407	*	...	*	*	...	*	*	...	*	*	15
1	1	*	1	...	2	*	1	1	*	1	4	*	*	*	16
*	2,70	*	1,22	1,01	*	49	68	60	*	2,83	1,45	1,65	65	*	17
*	4,548	*	1,297	4,114	*	2,414	2,198	2,988	*	5,558	1,152	5,764	3,280	*	18
COACHING STOCK.															
22	...	21	54	8	18	14	25	13	12	88	41	56	19	16	19
12	74	43	...	...	...	...	...	...	...	3	−1	...	1	9	20
34	74	64	54	8	18	14	25	13	12	91	40	56	20	19	21
0·01	0·27	0·02	0·07	0·06	0·05	...	0·07	0·20	...	0·44	0·06	...	...	0·07	22
0·01	0·27	0·02	0·06	...	0·05	...	0·04	...	...	0·62	...	...	...	...	23
...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	24
0·21	0·40	0·29	0·35	0·14	0·33	0·44	0·52	0·30	...	0·66	0·16	1·39	0·71	0·23	25
0·03	0·30	0·16	0·09	0·12	0·03	0·25	0·11	0·15	...	0·06	0·10	0·56	0·30	0·20	26
0·26	1·24	0·49	0·57	0·32	0·46	0·69	0·20	0·65	...	1·78	0·32	1·95	1·01	0·63	27
9,829	401	29,836	*	4,047	*	...	*	*	...	2,395	*	...	...	*	28
9,829	398	15,010	*	...	*	...	*	...	...	1,711	...	...	...	...	29
...	...	...	...	...	...	...	*	...	...	...	...	...	...	...	30
7,852	1,202	26,731	*	18,880	*	*	*	*	...	1,585	*	*	*	*	31
22,569	331	15,260	*	6,474	*	*	*	*	...	17,965	*	*	*	*	32
9,963	2,332	22,746	*	11,359	*	*	*	*	...	1,592	*	*	*	*	33
27	6	62	*	31	*	*	*	*	...	4	*	*	*	*	34
4	*	11	*	7	*	*	*	*	...	1	...	*	*	*	35
...	...	1	6	...	3	*	*	*	...	*	*	*	*	*	36
*	1,33	*	1,26	*	*	*	67	*	...	*	1,04	*	*	*	37
*	2,243	*	1,330	*	*	*	2,167	*	...	*	823	*	*	*	38
GOODS STOCK.															
20	...	74	20	2	58	4	20	30	...	37	30	14	4	41	39
55	...	32	83	14	...	...	15	18	...	152	53	9	4	25	40
...	...	7	...	...	2	...	...	2	...	17	...	...	...	...	41
...	...	2	1	...	10	4	...	...	326	6	100	10	...	9	42
75	...	115	104	16	70	8	35	50	326	212	183	33	8	75	43
150	15	...	...	...	...	−4	...	...	...	...	35	...	...	1	44
25	60	...	−36	...	...	...	...	...	...	...	...	−1	...	−1	45
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46
...	...	52	...	...	1	...	...	...	...	...	1	...	...	...	47
175	75	52	−36	...	1	4	...	...	...	...	36	−1	...	...	48
170	15	74	20	2	58	...	20	30	...	37	65	14	4	42	49
80	60	32	47	14	...	...	15	18	...	152	53	8	4	24	50
...	...	7	...	2	...	...	...	2	...	17	...	...	...	...	51
...	...	54	1	11	4	...	...	...	326	6	101	10	...	9	52
250	75	167	68	16	71	4	35	50	326	212	219	32	8	75	53
1·88	1·26	1·27	0·74	0·65	1·82	0·20	1·12	2·50	0·53	4·16	1·73	1·11	0·41	2·48	54
1,006	1,173	7,005	*	2,402	*	*	*	*	*	870	*	*	*	*	55
3	3	19	*	7	*	*	*	*	*	2	*	*	*	*	56
7·45	3·25	4·49	3·25	6·98	3·13	...	2·75	*	...	*	*	2·75	2·75	*	57
4·59	2·75	3·20	3·80	4·06	*	...	2·15	*	...	*	*	2·50	2·50	*	58
10·96	5·00	8·64	4·50	9·04	4·76	...	5·00	*	...	0·37	*	5·00	5·00	*	59
9·64	5·00	7·98	7·10	7·38	...	*	5·00	*	...	0·37	*	5·00	5·00	*	60
5·00	*	1·64	*	2·26	*	*	*	*	...	*	*	*	*	*	61
5	*	12	*	5	*	*	*	*	...	9	*	*	*	*	62
...	...	3	7	...	3	*	*	*	*	*	*	*	*	*	63
*	97	*	1,37	47‡	*	88‡	53	1,00‡	*	3,19‡	98	2,96‡	1,03‡	*	64
*	1,623	*	1,457	1,900	*	4,370	1,702	5,032	*	6,243	778	10,323	5,224	*	65
14,95	5,00	11,07	3,85	1,48	1,42	1,37	1,88	1,60	§	6,02	2,47	4,82	1,68	2,01	66
11,343	8,414	8,385	4,084	6,014	3,595	6,784	6,067	8,020	§	11,801	2,753	16,087	8,104	6,645	67
ROLLING-STOCK UNDER SUPPLY.															
1	11	...	...	...	...	...	...	...		2	...	...	...	...	68
40	...	8	...	...	...	...	...	...	...	...	...	...	...	...	69
52	75	10	...	...	...	...	...	...	...	...	...	...	...	...	70

Included with the North Western State railway.

Appendix 24.
Automatic brakes.

APPENDIX 24.

(Appendix 35 in Report for 1902.)

Rolling-stock fitted with automatic brakes at close of 1903.

(Referred to in paragraph 14 of Report).

Number.		Gauge.	Railway.	Locomotives.			Coaching vehicles including all brake-vans.				Goods vehicles, excluding cranes.			
Main head.	Sub-head.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	...	5′ 6″	Bengal Central	5	22	18·51	...	3	116	2·52	...	...	495	...
2	(a)		Bengal-Nagpur	97	116	45·54	606	39	266	70·80	289	10	6,132	4·65
3	(a) to (f)		Bombay, Baroda and Central India	161	50	76·30	492	8	134	78·86	1	45	*4,968	0·92
4	(a)		Eastern Bengal State	104	35	74·82	454	47	70	87·74	...	15	3,026	0·49
5	...		East Indian	397	504	44·06	1,441	95	787	66·12	5	108	16,321	0·69
6	(a)		Great Indian Peninsula	294	316	48·20	1,243	...	470	72·56	...	95	7,746	1·21
6	(b) to (e)		Indian Midland	130	63	67·36	191	46	274	46·38	...	39	3,057	1·26
7	(a) to (c)		Madras	121	128	48·59	799	43	340	71·24	...	11	4,815	0·23
8	(a) & (b)		Nizam's Guaranteed State	...	61	...	56	4	129	31·75	...	...	978	...
9	(a) to (e)		North Western State	585	115	83·57	1,915	88	332	85·96	786	105	10,575	7·77
10	(a) & (b)		Oudh and Rohilkhand State	90	103	46·63	651	51	148	82·59	26	10	5,408	0·66
11	...	5′ 3″	Assam-Bengal	54	9	85·71	203	...	13	93 98	102	...	1,592	6·02
12	...		Bengal and North-Western	50	175	22·22	94	6	826	10·80	...	...	5,849	...
13	...		Bengal Dooars	...	10	...	...	...	73	...	...	...	325	...
14	...		Bhavnagar-Gondal-Junagad-Porbandar	...	37	...	...	...	26	...	...	...	1,046	...
15	...		Burma	128	108	54·24	357	45	556	41·96	151	5	4,205	3·58
16	...		Deoghur	...	4	...	...	...	12	...	...	...	8	...
17	...		Dibru-Sadiya	...	22	...	...	...	81	...	...	...	598	...
4	(b) to (d)	3′ 3½″	Eastern Bengal State†	82	43	65·60	410	47	175	72·31	...	2	3,430	0·05
8	(c)		Hyderabad Godavari Valley	...	55	...	...	...	164	...	...	...	814	...
18	...		Jodhpur-Bikaner	...	48	...	...	...	185	...	...	...	893	...
7	(d) & (e)		Nilgiri and Shoranur-Cochin	4	5	44·44	12	1	31	29·55	16	...	123	11·51
3	(g) to (l)		Rajputana-Malwa	...	432	...	...	...	1,691	...	...	...	‡7,241	...
19	(a) & (b)		Rohilkund and Kumaon	10	31	24·39	...	...	173	...	...	...	1,123	...
20	...		South Indian	29	189	13·20	167	2	845	16·67	...	...	3,375	...
21	...		Southern-Mahratta	...	238	...	...	...	1,053	...	...	...	4,840	...
22	...		Udaipur-Chitor	...	3	...	...	...	26	...	...	...	35	...
24	...	2′ 6″	Barsi Light	...	5	...	...	...	7	...	...	...	61	...
25	...		Bukhtiarpore-Behar Light	...	3	...	...	...	23	...	...	...	20	...
4	(e)		Cooch Behar†	...	13	...	...	...	49	...	...	...	261	...
3	(m) & (n)		Gaekwar's Dabhoi and Rajpipla	...	13	...	...	...	54	...	...	...	209	...
2	(b) & (d)		Jubbulpore-Gondia and Rajpur-Dhamtari	9	7	56·25	12	...	22	35·29	175	...	75	70·00
28	...		Kalka-Simla	10	2	83·33	74	...	...	100·00	...	12	63	16·00
9	(f) & (g)	2′ 0″	Khushalgarh-Kohat-Thal and Nowshera-Durgai	...	23	...	...	...	64	...	...	...	167	...
30	...		Morvi	...	7	...	...	...	54	...	...	...	68	...
2	(c)		Parlakimedi Light	...	3	...	...	...	8	...	...	...	16	...
19	(c)		Powayan Ligh	...	5	...	...	...	18	...	...	...	71	...
21	...		Ranaghat-Krishnagar Light	...	2	...	...	...	14	...	...	...	4	...
32	...		Tarakeshwar-Magra Light	...	4	...	...	...	25	...	...	...	35	...
34	...		Tezpore-Balipara Light	...	3	...	...	...	13	...	...	...	50	...
9	(h)	1′ 11½″	Dandot Light	...	7	...	...	...	§12	...	...	...	326	...
36	...		Darjeeling-Himalayan	...	16	...	...	...	91	...	...	...	212	...
6	(f)	1′ 0″	Gwalior Light	...	11	...	...	...	40	...	...	...	219	...
37	...		Howrah-Amta Light	...	7	...	...	...	56	...	...	...	32	...
38	...		Howrah-Sheakhala Light	...	4	...	...	...	20	...	...	...	8	...
39	...		Jorhat State	...	7	...	...	...	19	...	...	...	74	...
			Total ...	2,360	3,069	43·47	9,207	525	9,823	49 77	1,551	457	101,289	1·94

* Includes 100, 5′ 6″ gauge, coal wagons borne on the Rajputana-Malwa railway rolling-stock list.

† Excludes the Teesta-Kurigram branch and the British section of the Cooch Behar-Santrabari extension, 2′ 6″ gauge lines, particulars of which are included with the Cooch Behar railway.

‡ One hundred, 5′ 6″ gauge, coal wagons belonging to this railway have been shown with the Bombay, Baroda and Central India railway rolling-stock.

§ These vehicles belonged to the old Ferozepore Steam tramway.

APPENDIX 25.

(Appendix 36 in Report for 1902.)

Rolling-stock lighted by gas and electricity.

(Referred to in paragraph 15 of Report.)

Number. Main head.	Number. Sub-head.	Gauge.	Railways.	Number of coaching vehicles fitted.	Number of coaching vehicles not fitted.	Proportion per cent. of fitted to total.	Remarks.
1	...	5′ 6″.	Bengal Central	...	119	...	
2	(*a*)		Bengal-Nagpur	574	286	66·74	
3	(*a*) to (*f*)		Bombay, Baroda and Central India	400	14	96·62	
4	(*a*)		Eastern Bengal State	435	130	76·99	
5	...		East Indian	1,208	457	72·55	
6	(*a*)		Great Indian Peninsula	970	71	93·18	
6	(*b*) to (*e*)		Indian Midland	286	108	72·59	
7	(*a*) to (*c*)		Madras	896	259	77·58	
8	(*a*) & (*b*)		Nizam's Guaranteed State	121	61	66·48	
9	(*a*) to (*e*)		North Western State	1,670	434	79·37	
10	(*a*) & (*b*)		Oudh and Rohilkhand State	620	290	72·94	
11	...	3′ 3½″.	Assam-Bengal	181	10	94·76	
12	...		Bengal and North-Western	...	926	...	
13	...		Bengal-Dooars	...	73	...	
14	...		Bhavnagar-Gondal-Junagad-Porbandar	...	264	...	
15	...		Burma	15	880	1·68	
16	...		Deoghur	...	12	...	
17	...		Dibru-Sadiya	...	81	...	
4	(*b*) to (*d*)		Eastern Bengal State*	473	154	75·44	* Excludes the Teesta-Kurigram branch and the British section of the Cooch Behar-Santrabari extension, 2′ 6″ gauge lines, particulars of which are included with the Cooch Behar railway.
8	(*e*)		Hyderabad-Godaveri Valley	114	50	71·26	
18	...		Jodhpur-Bikaner	...	185	...	
7	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	...	44	...	
3	(*g*) to (*i*)		Rajputana-Malwa	140	1,520	8·43	
19	(*a*) & (*b*)		Rohilkund and Kumaon	...	173	...	
20	...		South Indian	91	881	9·37	
21	...		Southern Mahratta	934	54	94·53	
22	...		Udaipur-Chitor	...	26	...	
24	...	2′ 6″.	Barsi Light	...	7	...	
25	...		Bukhtiarpore-Behar Light	...	23	...	
4	(*e*)		Cooch Behar *	...	49	...	
3	(*m*) & (*n*)		Gaekwar's Dabhoi and Rajpipla	...	54	...	
2	(*b*) & (*d*)		Jubbulpore-Gondia and Raipur-Dhamtari.	12	22	35·29	
28	...		Kalka-Simla	74	...	100·00	
9	(*f*) & (*g*)		Khushalgarh-Kohat-Thal and Nowshera-Dargai.	...	64	...	
30	...		Morvi	...	54	...	
2	(*c*)		Parlakimedi Light	...	8	...	
19	(*c*)		Powayan Light	...	18	...	
31	...		Ranaghat-Krishnagar Light	...	14	...	
33	...		Tarakeshwar-Magra Light	...	25	...	
34	...		Tezpore-Balipara Light	...	13	...	
9	(*h*)	2′ 0″.	Dandot Light	...	12†	...	† These vehicles belonged to the old Ferozepore Steam Tramway.
36	...		Darjeeling-Himalayan	...	91	...	
6	(*f*)		Gwalior Light	...	40	...	
37	...		Howrah-Amta Light	...	56	...	
38	...		Howrah-Sheakhala Light	...	20	...	
39	...		Jorhat State	...	19	...	

Appendix 26.
Interlocking and signalling.

APPENDIX 26.

(Appendix 37 in Report for 1902.)

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at close of 1903.

(Referred to in paragraph 16 of Report.)

Number.		Gauge.	Railway.	Total number of stations on railway.	Stations at which points and signals were interlocked.		Stations at which block instruments were used for train signalling.	
Main head.	Sub-head.				No.	Name of system of interlocking.	No.	Name of block instrument.
1	...	5′ 6″	Bengal Central	27	...	...	...	...
2	(a)		Bengal-Nagpur	226	87	86 List and Morse's 1 Experimental	18	7 Webb and Thomson's. 11 Experimental.
3	(a) to (f)		Bombay, Baroda and Central India	127	25	16 Mackenzie and Holland's. 9 Experimental	76	68 Preece's single wire semaphore.* 8 Sykes'.
4	(a)		Eastern Bengal State	82	15	9 Mackenzie and Holland's. 6 Experimental	...	...
5	...		East Indian	360	124	87 English system 36 Dutton's 1 Experimental	116	75 Pryce and Ferreira's. 37 Tyer's Tablet. 4 Experimental.
6	(a)		Great Indian Peninsula	234	31	24 Saxby and Farmer's 7 Experimental	234	234† Preece's single wire semaphore.* 15† Experimental.
6	(b) to (e)		Indian Midland	140	13	11 Wrench's 2 Experimental	14	Preece's.*
7	(a) to (c)		Madras	287	54	37 List and Morse's 17 Experimental	146	104 Winter's Block with starting semaphores.* 20 Winter's Block without starting semaphores.* 22 Theobald's Train Key.
8	(a) & (b)		Nizam's Guaranteed State	45	1	Dutton's	...	...
9	(a) to (e)		North Western State	516	256	210 List and Morse's 23 Tappet 20 Key locking 3 Experimental	11	9 Tyre's Tablet. 2 Experimental.
10	(a) & (b)		Oudh and Rohilkhand State	169	84	78 List and Morse's 6 Experimental	...	...
11	...		Assam-Bengal	98	...	...	...	...
12	...		Bengal and North-Western	251	...	...	...	...
13	...		Bengal-Dooars	28	...	...	...	...
14	...		Bhavnagar-Gondal-Junagad-Porbandar	64	1	Experimental	...	...
15	...		Burma	213	2	1 Dutton's 1 Saxby and Farmer's	4	Tyer's Tablet.
16	...		Deoghur	1	...	...	...	...
17	...		Dibru-Sadiya	17	...	...	...	...
4	(b) to (d)		Eastern Bengal State	120	19	18 List and Morse's 1 Tappet	20	Tyer's Tablet.
8	(c)	3′ 3⅜″	Hyderabad-Godavari Valley	46	41	41 List and Morse's	...	...
18	...		Jodhpur-Bikaner	84	...	...	...	...
7	(d) & (e)		Nilgiri and Shoranur-Cochin	21	...	...	12	6 Winter's Block with starting semaphores.* 6 Theobald's Train Key.
3	(g) to (l)		Rajputana-Malwa	272	24	2 Dutton's 4 Mackenzie and Holland's. 18 Country made	20	17 Tyer's Tablet. 3 Sykes'.
19	(a) & (b)		Rohilkund and Kumaon	47	...	...	...	...
20	...		South Indian	220	7	6 Dutton's 1 Saxby and Farmer's	21	Winter's Ticket issuing.
21	...		Southern Mahratta	230	...	...	105	101 Winter's.* 4 Theobald's Train Key.
22	...		Udaipur-Chitor	7	...	...	...	...
24	...	2′ 6″	Barsi Light	4	...	...	...	...
25	...		Bukhtiarpore-Behar Light	7	...	...	...	...
4	(e)		Cooch-Behar	7	...	...	...	...
3	(m) & (n)		Gaekwar's Dabhoi and Rajpipla	28	1	Country made	...	...
2	(b) & (d)		Jubbulpore-Gondia and Raipur Dhamtari	16	...	...	...	...
9	(f) & (g)		Khushalgarh-Kohat-Thal and Nowshera-Durgai.	19	...	...	...	...
28	...		Kalka-Simla	19	...	...	...	...
30	...		Morvi	14	...	...	...	...
2	(c)		Parlakimedi Light	6	...	...	...	...
19	(c)		Powayan Light	8	...	...	...	...
31	...		Ranaghat-Krishnagar Light	8	...	...	...	...
33	...		Tarakeshwar-Magra Light	13	...	...	...	...
34	...		Tezpore-Balipara Light	8	...	...	...	...
36	...	2′ 0″	Darjeeling-Himalayan	11	...	...	...	...
6	(f)		Gwalior Light	18	...	...	...	...
37	...		Howrah-Amta Light	14	...	...	...	...
38	...		Howrah-Sheakhala Light	11	...	...	...	...
39	...		Jorhat	8	...	...	...	...
			Total	4,115	785	...	797	

* These systems do not give out a token or tablet.

† At 15 stations two kinds of instruments are in use.

APPENDIX 27.

(Appendix 28 in Report for 1902.)

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1899 to 1903.

(Referred to in paragraphs 21 and 23 of Report.)

N.B.—A reference to Appendix 1 will furnish the key to the code letters used to denote railway systems.

Number.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	Average distance carried in miles.‡ Coal.	Average distance carried in miles.‡ Wood.	Description of fuel with actual quantity consumed and cost per ton. Foreign coal. Quantity in tons.	Foreign coal. Cost per ton. Including freight.	Foreign coal. Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Indian coal. Cost per ton. Including freight.	Indian coal. Cost per ton. Excluding freight.	Wood. Quantity in tons.	Wood. Cost per ton. Including freight.	Wood. Cost per ton. Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
1	B. C.	1899	Bengal	162	...	...	...	...	9,264	6·24	3·25	...	...	...	50·59	45·79	1,662·07	216·39
		1900		162	...	...	...	...	9,585	6·35	3·00	...	...	...	48·62	40·92	1,106·46	182·55
		1901		162	...	...	...	...	8,710	6·20	3·00	...	...	...	52·05	41·75	1,283·43	172·62
		1902		162	...	...	...	...	8,466	6·27	3·00	...	...	...	51·47	41·24	1,368·09	201·02
		1903		162	...	...	...	...	10,623	6·00	3·00	...	...	...	51·10	41·10	1,278·70	256·13
2 (a)	B. N.	1899	Bengal and Umaria	269	...	...	...	...	60,955	6·82	3·39	...	...	...	58·64	52·91	567·92	151·82
		1900		242	...	...	...	...	101,215	5·99	2·99	...	...	...	68·30	61·62	508·83	164·41
		1901		331	...	...	...	...	95,231	6·26	2·50	...	...	...	57·99	51·92	826·90	178·95
		1902		321	...	...	...	...	113,180	4·29	2·48	103	5·60	5·60	59·84	53·37	759·43	178·58
		1903		283	...	...	...	...	134,066	3·71	2·48	206	4·20	...	65·95	57 33	775·46	199·42
2 (c)	P. L. L.	1899	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		603	...	...	...	...	350	7·96	2·37	...	...	...	41·56	39·06	...	...
		1903		567	...	...	...	...	362	7·40	2·12	...	...	...	44·43	42·06	5,545·54	664·51
2 (d)	R. D.	1899	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		482	...	...	...	...	369	8·12	2·44	...	...	...	...	...	...	...
		1901		481	...	...	...	...	599	8·06	2·38	...	...	...	22·70	22·11	1,282·31	367·28
		1902		480	...	...	...	...	554	6·41	2·27	...	...	...	23·31	22·75	1,266·15	378·98
		1903		463	...	...	...	...	688	6·07	2·12	...	...	...	26·61	26·35	1,486·37	437·75
2 (b)	J. G. E.	1899	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1903		603	...	...	...	...	191	7·68	2·12	...	...	...	64·35	60·52	1,135·88	398·30
3 (a) to (f)	B., B. & C. I.	1899	England, Bengal and Singareni.	164	...	26,212	19·68	...	53,042	15·16	...	1,885	4·05	...	56·92	48·97	492·76	148·24
		1900		164	...	16,136	22·73	...	74,587	15·84	...	2,175	3·88	...	58·35	50·17	510·34	146·31
		1901		138	...	5	27 00	...	77,916	16·13	...	2,049	3·80	...	60·26	51·16	524·84	155·57
		1902		128	...	7,477	20 00	...	65,559	15·98	...	2,063	3·27	...	58·11	48·99	543·66	154·30
		1903		121	...	10,384	19·38	...	63,172	14·56	...	2,226	3·00	...	57·58	48·16	514·46	148·09
3 (m) & (n)	G. D. & R.	1899	England and Bengal	...	...	184	...	...	950	...	...	91	...	...	24·24	23·78	...	...
		1900		...	...	145	...	..	1,045	...	...	59	...	...	24·25	24·14	...	...
		1901		...	...	...	...	...	1,245	...	...	54	...	...	25·65	25·48	...	...
		1902		...	...	...	...	...	1,089	...	...	24	...	...	24·18	24·02	...	...
		1903		...	...	...	...	...	1,417	...	...	70	...	...	25·50	25·17	...	...
4 (a)	E. B. S.	1899	Bengal	...	...	...	...	...	56,805	5·02	...	...	...	...	62·83	44·37	844·02	194·99
		1900		177	...	...	...	...	62,485	5·69	2·90	...	...	...	68·39	48·47	881·82	201·92
		1901		186	...	...	...	...	65,477	5·93	2·80	...	...	...	71·66	51·09	1,008·11	226·09
		1902		167	...	...	...	...	67,891	6·10	3·48	...	...	...	69·86	49·57	889·42	209·53
		1903		156	...	...	...	...	69,266	5·65	2·81	...	...	...	72·02	50 20	919·95	212·78
4 (b) to (d)	E. B. S.	1899	Bengal and Assam	...	...	...	...	...	31,544	5·97	...	...	...	...	35·62	29·53	800·28	203·07
		1900		287	...	...	...	...	35,904	8·20	3·59	...	...	...	38·32	30·77	788·05	215·42
		1901		303	...	...	...	...	40,271	8·71	3·89	...	...	...	39·75	32·18	920·93	229·57
		1902		291	...	...	...	...	42,836	9·82	5·14	...	...	...	42·62	34·31	898·88	235·43
		1903		280	...	...	...	...	47,247	6·52	3·78	...	...	...	44·07	35·65	844·38	229·44
4 (e)	C. B.	1899	Bengal and Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		467	...	...	...	...	785	10·69	4·18	...	...	...	29·95	19·13	...	...
		1903		85	...	...	...	...	980	9·86	9·04	...	...	...	23·76	21·50	...	...
...	E. C.	1899	Bengal and Singareni	220	...	...	...	...	37,247	7·32	...	...	...	...	55·99	50 47	812·89	180·45
		1900		249	...	...	...	...	53,479	7·47	...	...	...	...	60·38	56·00	689·85	178·13
		1901		Transferred partly to the Bengal-Nagpur and partly to the Madras railways.														
5	E. I.	1899	Bengal and Umaria	243	...	...	...	...	412,376	4·15	2·08	...	...	...	62·37	50·82	475·67	167·41
		1900		255	...	...	...	...	461,061	4·19	2·03	...	...	...	63·89	51·61	491·99	173·42
		1901		245	...	...	...	...	474,034	4·00	1·91	...	...	...	63·05	50·47	470·61	164·71
		1902		260	...	...	...	...	481,247	4·18	1·96	...	...	...	63·92	50·76	503·10	161·42
		1903		256	...	...	...	...	476,581	4·19	2·00	...	...	...	65·75	51·97	457·12	151·16

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.

Appendix 27.
Fuel comsumption.

APPENDIX 27—*contd.*

(Appendix 28 in Report for 1902.)

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1899 to 1903—contd.

(Referred to in paragraphs 21 and 23 of Report.)

N.B.—A reference to Appendix 1 will furnish the key to the code letters used to denote railway systems.

Number.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	Average distance carried in miles.‡ Coal.	Average distance carried in miles.‡ Wood.	Description of fuel with actual quantity consumed and cost per ton. Foreign coal. Quantity in tons.	Foreign coal. Cost per ton. Including freight.	Foreign coal. Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Indian coal. Cost per ton. Including freight.	Indian coal. Cost per ton. Excluding freight.	Wood. Quantity in tons.	Wood. Cost per ton. Including freight.	Wood. Cost per ton. Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
6 (a) to (e)	G. I. P.	1899	England Bengal, Singareni, Umaria, Nerbuda and Warora.	350	...	197	...	19·50	337,716	8·31	5·48	3,511	...	2·86	64·77	56·73	792·26	266·41
		1900		371	...	...	...	...	376,245	7·86	5·24	3,883	...	3 05	68·79	59·91	819·32	209·94
		1901		318	...	...	...	...	381,380	8·57	6·18	4,549	...	2·62	66·60	52·86	764·21	198·21
		1902		294	...	303	...	12·87	425,936	8·38	5·98	4,515	...	3·81	66·79	58·11	719·69	193·63
		1903		327	...	...	...	...	456,794	8·47	6·07	4,439	...	3·91	68·43	59·65	798·03	206·32
6 (f)	G. L.	1899	Bengal and Mohpani.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	962	...	...	47	...	...	29·06	...	...	...
		1901		...	...	...	...	...	886	...	...	16	...	...	37·71	35·99	...	...
		1902		...	...	...	...	...	1,400	...	...	...	...	...	35·03	35·03	...	...
		1903		750	...	...	...	...	1,617	16·60	2·75	14	...	...	38·30	36·00	...	...
7 (a) to (c)	M.	1899	England, Bengal and Singareni.	‡	17	37	26·00	8·18	43,555	12·64	4·75	86,212	5·14	4·79	64·87	53·70	1,003·94	225·28
		1900		294	17	229	32·90	12·50	44,900	12·67	4·75	87,615	4·95	4·60	63·90	52·81	997·90	226·56
		1901		434	15	125	32·90	12·50	94,484	13·52	4·04	94,503	5·74	5·42	63·66	54·19	882·19	212·76
		1902		313	14	...	...	...	97,546	10·32	5·25	108,529	4·97	4·68	68·64	57·65	974·72	227·03
		1903		333	27	...	...	...	112,647	10·29	5·12	96,577	4·27	4·42	73·02	60·89	1,069·81	240·40
7 (d) & (e)	S. C. & N.	1899	England, Bengal and Singareni.	328	...	1,004	31·12	8·18	11	17·77	4·75	157	3·94	...	94·41	91·15	...	...
		1900		328	...	1,229	38·03	12·50	8	16·79	4·75	300	3·87	...	79·14	75·52	...	...
		1901		328	...	1,510	38·03	12·50	5	18·45	4·04	385	4·00	...	88·82	85·85	1,410·33	1,302·99
		1902		241	16	1,875	31·67	$27·57	...	...	...	3,315	4·43	4·09	72·38	66·69	4,899·75	654·46
		1903		688	18	1,662	29·00	$29·17	11	18·60	5·12	5,889	4·61	4·25	61·42	54·08	2,409·43	369·85
8 (a) & (b)	N. G. S.	1899	Singareni	105	...	...	...	...	27,675	...	4·60	...	...	...	65·02	56·67	493·59	163·98
		1900		101	...	...	...	...	36,625	...	4·36	...	...	...	69·96	60·89	541·65	172·81
		1901		102	...	...	...	...	29,307	...	4·60	...	...	...	63·54	54·15	587·37	174·91
		1902		103	...	...	...	...	30,215	...	4·66	...	...	...	67·00	56·75	567·37	173·81
		1903		132	...	...	...	...	26,967	6·27	4·50	250	5·38	3·25	61·02	51·91	547·72	160·95
8 (c)	H. G. V.	1899	Singareni	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		493	...	...	...	...	8,969	10·77	4·50	...	...	...	44·00	40·39	1,197·34	264·49
		1901		321	...	...	...	...	13,851	7·19	4·50	...	...	...	41·08	37·73	1,189·82	231·26
		1902		341	...	...	...	...	14,442	6·98	4·86	...	...	...	40·12	36·11	1,026·21	219·62
		1903		347	...	...	...	...	14,610	10·00	6·62	265	4·60	...	39·66	35·55	1,031·64	217·01
9 (a) to (e)	N. W¶	1899	England, Bengal, Dandot, Bhaganwala and Khost.	‖838	...	29,768	...	19·20	144,878	‖15·63	7·56	145,008	5·27	...	50·54	44·61	553·11	147·59
		1900		‖838	...	24,035	...	26·80	158,458	‖17·25	7·44	123,828	5·36	...	53·25	46·59	680·47	171·20
		1901		‖838	...	11,074	...	22·27	194,134	‖16·81	5·38	180,521	5·21	...	51·24	44·95	520·93	149·71
		1902		‖838	...	7,206	...	20·61	248,279	††	‡‡	122,323	...	...	52·84	46·36	593·84	160·45
		1903		‖838	...	3,736	...	19·00	258,111	§§	‖‖	216,097	5·31	...	52·72	46·47	557·78	155·74
9 (f) & (g)	K. K. T. & N. D. **	1899	Bengal and Dandot.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	407	...	...	97	...	...	27·25	21·71	1,824·83	310·27
		1902		...	...	...	...	...	1,235	...	...	160	...	...	26·75	22·32	2,072·38	318·41
		1903		...	...	...	...	...	2,788	...	...	192	...	...	25·16	21·45	2,362·43	435·46
10 (a) & (b)	O. & R.	1899	Bengal	537	...	...	...	...	56,878	10·33	3·37	...	...	...	41·56	35·57	573·19	135·83
		1900		528	...	...	...	...	76,503	10 18	3·18	...	...	...	49·88	42·05	811·20	177·86
		1901		528	...	...	...	...	92,868	10·39	2·97	...	...	...	51·04	43·60	784 95	172·47
		1902		674	...	...	...	...	98,775	9·38	2·53	...	...	...	51·63	44·36	819·01	172 31
		1903		595	...	...	...	...	108,040	7·76	2·15	...	...	...	54·81	46·99	849·59	177·85
11	A. B.	1899	Bengal and Assam.	80	...	...	...	...	9,994	9·53	...	...	...	...	36·63	31·18	598·14	144·14
		1900		86	...	...	...	...	9,780	9·47	...	...	...	...	36·57	31·43	636 60	163·97
		1901		106	...	...	...	...	10,781	10·22	...	1,627	1·72	...	39·09	32·95	734·11	184·88
		1902		105	...	...	...	...	13,661	9 25	...	2,715	1·57	...	43·52	37·21	1,011·99	223·73
		1903		120	...	...	...	...	15,682	7·92	...	1,918	1·45	...	43·06	36·78	903·35	245·24
12 (a) to (c)	B. & N. W.	1899	Bengal	294	90	...	...	...	40,470	6·17	3·17	10,670	3·81	3·81	35·47	30·18	606·90	186·89
		1900		301	83	...	...	...	48,644	6·30	3·34	10,548	3·81	3 81	38·61	32·17	770·20	208·64
		1901		228	27	...	...	...	58,173	5·99	3·19	3,823	3·95	3·95	39·33	33·67	713·59	203·14
		1902		252	25	...	...	...	71,240	6·11	3·04	2,766	4·22	4·22	38·09	33 16	821·31	210·21
		1903		250	25	...	...	...	87,652	5·61	2·73	4,733	4·28	4·28	49·95	41·73	825·63	225·02

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.

† The name of the sources of supply is for coal only. Wood was supplied from various sources.

‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.

§ Including sea freight from England.

‖ Of Bengal coal only.

¶ Includes Nowshera-Durgai during the 1st-half of 1901.

** The figures against 1901 are for second-half only, those for the 1st-half are included with the North Western State railway.

†† Bengal coal *vid* Kiamari Rs. 13·62 and *vid* Ghaziabad Rs. 15·44.

‡‡ Bengal coal from Rs. 2·37 to Rs. 3·00 and Khost and Dandot coal between Rs. 7 and Rs. 13 and Khost patent fuel at Rs. 20.

§§ Bengal coal *vid* Kiamari Rs. 12·00 and *vid* Ghaziabad Rs. 14·88.

‖‖ Bengal coal from Rs. 2·06 to Rs. 3·50 and Khost and Dandot coal between Rs. 7 and Rs. 13.

APPENDIX 27—*contd.*

(Appendix 28 in Report for 1902.)

Appendix 27.
Fuel consumption.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1899 to 1903—contd.

(Referred to in paragraphs 21 and 23 of Report.)

N.B.—A reference to Appendix 1 will furnish the key to the code letters used to denote railway systems.

Number.	Railway.	Calendar year.	SOURCES OF SUPPLY. Name.†	Average distance carried in miles.‡ Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
13	B. D.	1899	Bengal	§	...	...	...	...	1,080	10·27	...	...	...	...	61·75	47·52	...	...
		1900				...	...	...	1,388	13·11	...	...	...	...	53·65	37·01	...	...
		1901				...	...	...	2,789	15·84	...	...	...	...	49·97	41·10	...	...
		1902				...	...	...	2,495	12·33	2·75	...	...	...	40 16	33·92	...	...
		1903				...	...	...	3,023	11·22	...	...	...	...	31·35	29·83	...	...
14	B. G. J. P.	1899	England, Bengal and Palana.	68	...	4,006	25·00	...	3,343	18·00	...	84	4·25	...	26·91	24·98	761·06	160·39
		1900		59	...	1,725	...	...	7,647	17·87	...	98	4·50	...	30·78	28·24	843·17	184·84
		1901		61	...	254	...	...	6,940	18·69	...	79	10·87	...	31·19	28 57	787 67	188·69
		1902		52	...	1,494	23·23	...	4,966	18·00	...	74	8·88	...	29·77	27·45	913·30	174·64
		1903		54	...	813	23·24	...	6,027	15 44	...	80	7·75	...	30·26	27 32	800·61	170·38
15	B.	1899	England, Bengal and Burma.	105	...	694	...	...	46,028	15·39	...	30,266	3·64	...	45·12	37·21	929·54	231·64
		1900		128	...	...	...	...	58,020	15·62	...	44,826	3·70	...	49 80	41·12	959 88	273·70
		1901		131	...	...	...	...	70,376	14·88	...	48,802	3·53	...	54·67	44·74	1,013·12	289·08
		1902		120	...	3,114	26·75	...	62,124	12·57	...	55,474	3 95	...	52·33	42·54	972·47	255·40
		1903		109	...	968	21 36	...	72,740	10·63	...	66,406	3·81	...	51·98	42·70	1,087 55	258·16
16	D.	1899	Bengal	118	...	...	...	...	295	5·00	...	...	...	...	45·40	45·40	...	467·64
		1900		118	...	...	...	...	328	5·00	...	...	...	...	48·00	48·00	...	734·00
		1901		118	...	...	...	...	382	5·31	...	...	...	...	56·41	56 41	...	...
		1902		...	...	...	...	...	400	5·62	3·00	...	...	...	61 37	61 37	...	...
		1903		...	...	...	...	...	393	4·06	...	...	...	...	56 55	56·55	...	...
17	D. S.	1899	Assam	§	...	...	...	...	4,653	8·50	...	20	2·05	...	44·20	31·36	...	...
		1900				...	...	...	4,458	8·50	...	41	2 05	...	44·19	28 34	...	...
		1901				...	...	...	4,834	8·50	...	21	2·36	...	45·54	30·08	...	...
		1902				...	...	...	4,616	8·50	8·50	26	2 08	1·28	51·64	36·75	...	...
		1903				...	...	...	3,983	8·50	8·50	12	2·56	2·00	43 67	29 46	...	...
18	J. B.	1899	Bengal and Palana.	995	...	...	...	...	8,951	20·97	3·76	...	...	...	34·92	33·06	569·70	175·30
		1900		913	...	...	...	...	10,393	18·87	4·48	...	...	...	37·07	35 34	644·16	203·21
		1901		665	...	...	...	...	13,551	...	4·47	2,791	...	4 62	42·38	40·20	928 57	240 94
		1902		467	...	...	...	...	18,231	11·59	5·55	4,981	...	4·34	47·63	45·42	1,060·85	261·76
		1903		358	...	...	...	...	22,420	11 98	7·36	120	4·38	...	52·50	49·61	1,048·94	267 31
3(*g*) to (*l*)	B. M.	1899	England, Bengal and Singareni.	733	...	20,548	24·74	19·65	82,081	18·82	5·11	2,054	5·00	...	35·41	31·15	419·71	151·74
		1900		719	...	11,703	26·43	20·30	172,658	18·20	9·41	2,121	5 00	...	37·76	33·60	411·32	155 49
		1901		720	...	260	...	...	118,278	18·24	6·84	2,900	5 00	...	39·17	34·49	415·75	160 57
		1902		722	...	...	...	...	113,360	16·57	5·74	2,183	5·00	5·00	39·84	34·62	447 79	164·89
		1903		725	...	...	...	...	95,725	15·79	6 03	2,615	5·00	5 00	37 60	31·93	474 48	161·48
19 (*a*) &(*b*)	R. & K.	1899	Bengal	669	...	...	...	...	272	13·52	3·33	14,610	3·21	...	33·62	19·46	482·77	189·91
		1900		669	...	...	...	...	293	16·32	6·13	15,629	3·03	...	25·29	20·61	555·15	158·62
		1901		677	...	...	...	...	1,106	14·65	3·54	16,302	3 24	...	28·26	22·93	611 42	172·87
		1902		677	...	...	...	...	2,068	13·52	2·56	17,503	...	3·18	32·00	25·98	681·90	188·86
		1903		677	...	...	...	...	1,792	11·46	2·37	17,105	...	3·27	30·91	25 25	615 37	173·58
19 (*c*)	P. W. L.	1899	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		...	...	...	...	...	...	...	...	1,440	...	3·05	21·03	19·91	...	...
		1903		...	...	...	...	...	...	...	...	1,226	...	3·26	19·03	17·81	...	...
20	S. I.	1899	Bengal and Singareni.	51	...	...	...	...	49,566	12 95	...	12,402	4·75	...	35·96	31·21	1,048·01	227·22
		1900		57	...	...	...	...	51,682	13·13	...	1,858	4·54	...	35·68	32·04	1,003·16	248·69
		1901		60	...	...	...	...	55,120	13·25	...	1,343	4·50	...	34·59	31·66	823·48	201·19
		1902		63	...	...	...	...	53,278	13·11	...	10,782	5·01	...	36·44	33·19	822·47	209 97
		1903		82	...	...	...	...	60,096	12·18	...	10,516	4·91	...	37·71	34·23	774·08	205·48
21 (*e*) to (*g*)	S. M.	1899	England, Singareni and Bengal.	469	68	...	...	...	36,842	13·13	5·00	34,978	5 54	4·08	39·43	35·04	642 38	205·61
		1900		468	68	...	...	...	45,107	13·46	5·00	43,523	5·23	4·08	40 09	35·77	754·50	218·32
		1901		481	92	...	...	...	35,582	13 38	5·00	49,583	5·70	4·08	38·41	37·01	813·19	217·36
		1902		402	96	...	...	...	38,506	13·67	5·25	62,422	5 64	4·08	39·11	34·71	804·00	215·09
		1903		351	74	133	18·88	18·88	38,492	14·25	8·40	65,629	5·44	4·19	40·71	36.27	863 88	219·75

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.

Appendix 27.
Fuel consumption.

APPENDIX 27—*concld.*

(Appendix 28 in Report for 1902.)

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1899 to 1903—concld.

(Referred to in paragraphs 21 and 23 of Report.)

N.B.—A reference to Appendix 1 will furnish the key to the code letters used to denote railway systems.

Number.	Railway.	Calendar year.	SOURCES OF SUPPLY.* Name.†	Average distance carried in miles.‡ Coal.	Wood.	Description of fuel with actual quantity consumed and cost per ton. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lb.* Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.				
21 (h)	W. I. P.	1899	England	§	...	65	...	...	...	...	...	5,919	...	...	46·78	44·36	...	362·84
		1900				14	...	...	...	...	...	4,239	...	...	45·58	44·32	...	301·71
		1901				18	19·00	...	...	...	...	4,698	4·62	4·50	46 42	45·48	1,160·83	296·80
		1902				Included with the Southern Mahratta railway.												
		1903				...	...	...	...	...	...	...	...	...	...	...	...	...
22	U. C.	1899	Bengal, Warora and Mohpani.	1,000	...	...	...	...	750	25·31	4·50	3	8·00	...	32·90	28·88	892·25	165·02
		1900		1,032	...	...	...	...	1,202	25·44	4·50	3	7·42	...	40·95	37·46	798·71	190·20
		1901		826	...	...	...	...	862	25·30	4·25	3	9·30	...	37·49	34·79	881·31	180·15
		1902		875	...	...	...	...	893	18·23	4 62	3	4·36	...	38·50	36·02	942·41	192·23
		1903		977	...	...	...	...	863	18·71	3·65	4	7 00	7·00	37·37	35 02	1,438·32	207·76
24	B. L.	1899	Singareni	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	677	4·19	4·19	34·26	33·74	...	...
		1902		...	...	...	...	...	...	...	...	655	5·00	...	31·90	31·14	...	...
		1903		441	...	...	...	...	77	14·50	5 50	566	4·97	4·97	40·75	39·32	1,732·86	664·00
28	K. S.	1899	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1903		1,021	...	...	...	...	288	20·00	2·25	...	...	...	46·43	35·75	...	...
30	M. B. W.	1899	England and Bengal.	336	...	1,224	30·50	19·09	416	27·32	17·00	20	13·45	...	20·21	19·57	...	...
		1900		386	...	1,373	27·74	20·00	1,286	28·10	19·00	37	7·49	...	26·65	25·83	...	...
		1901		386	...	2	34·80	26 80	2,125	25·67	17·00	22	13·06	...	28·69	27·99	...	...
		1902		‖386	...	...	...	...	1,622	23·74	15·74	21	7·50	7·50	24·25	23·63	...	...
		1903		29	...	...	...	...	1,541	21·20	12·35	30	10·66	10·66	24·27	23·32	...	...
33	B. P.	1899	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	963	6·25	3·30	...	...	...	25·23	23·72	...	...
		1902		126	...	...	...	...	979	5·39	2·75	...	...	...	25·20	23·92	...	...
		1903		157	...	...	...	...	960	5·36	2·92	...	...	...	25·27	24·10	...	...
34	T. B.	1899	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	382	13·49	...	...	...	...	25·23	...	...	...
		1902		...	...	...	...	...	398	13·50	...	...	...	...	26·76	...	...	...
		1903		...	...	...	...	...	523	11·81	...	...	...	...	35·40	...	...	...
36	D. H.	1899	Bengal	404	...	...	...	...	3,067	...	2·75	...	...	...	41·72	41·72	...	...
		1900		404	...	...	...	...	3,385	...	3·12	...	...	...	40·24	40·24	...	...
		1901		404	...	...	...	...	3,052	15·26	3·12	...	...	...	38 38	38 38	...	...
		1902		...	...	...	...	...	3,422	15·30	3·12	...	...	...	40 81	40·81	...	...
		1903		...	...	...	...	...	4,666	13·98	3·12	...	...	...	53·23	53·23	...	...
39	J.	1899	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1900		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1903		9	...	...	...	...	773	13·76	13·62	...	...	...	33·15	...	...	...
	Total	1899	.....	...	...	83,939	...	...	1,560,204	...	...	347,890	...	...	...	...	...	...
		1900		...	...	56,589	...	...	1,858,061	...	...	340,830	...	...	...	...	...	...
		1901		...	...	13,248	...	...	1,956,601	...	...	409,150	...	...	...	...	...	...
		1902		...	...	21,469	...	...	2,091,992	...	...	402,442	...	...	...	...	...	...
		1903		...	...	¶17,696	...	...	2,203,889 ¶	...	...	¶497,185	...	...	...	...	...	...

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.
‖ This distance is by rail; the distance by sea is 637 miles.
¶ Excluding the Bukhtiarpore-Behar Light, Ranaghat-Krishnagar Light, Thaton-Duyinzaik, Howrah-Amta and Howrah-Sheakhala railways.

APPENDIX 28.

(Appendix 29 in Report for 1902.)

Coal produced in India during the calendar years 1885 to 1903.

(Referred to in paragraph 21 of Report.)

Years.	Quantity produced in each Province.												Quantity of Indian coal consumed by railways in India.	Quantity of Indian coal exported by sea.		Quantity of Foreign coal imported into India.	
	Bengal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Baluchistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports excluding Burma.	To ports outside India including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885.	1,123,700	119,116	43,707	7,698	...	...	...	...	...	...	...	1,294,221	486,716		500	778,643	40,659
1886.	1,186,802	117,287	70,859	13,539	...	...	...	...	...	...	...	1,388,487	470,075		199	698,482	44,652
1887.	1,319,090	128,981	89,302	15,497	3,259	7,523	...	411	...	...	...	1,564,063	488,774		315	786,149	43,010
1888.	1,380,594	157,768	101,528	41,580	13,382	11,249	...	2,802	...	...	...	1,708,903	551,770		15,796	785,776	20,463
1889.	1,541,356	144,465	116,676	52,956	59,646	22,835	...	8,238	...	...	...	1,946,172	715,240		39,972	717,024	52,180
1890.	1,626,245	137,022	145,708	77,842	125,486	40,677	...	15,541	...	...	...	2,168,521	654,829		26,336	691,725	21,857
1891.	1,747,122	141,736	154,208	69,741	144,668	60,714	...	10,368	...	20	...	2,328,577	797,142		4,515	726,069	17,344
1892.	1,920,050	132,005	164,050	88,623	149,601	66,352	...	13,284	...	61	3,670	2,537,696	885,492		15,725	628,374	23,123
1893.	1,902,866	135,118	164,420	94,348	157,421	77,294	...	20,094	...	502	9 938	2,562,001	924,900		52,302	616,319	18,066
1894.	2,035,934	140,495	169,448	132,837	240,525	66,467	...	24,753	...	1,337	12,111	2,823,907	1,062,748	143,813	154,282	675,043	57,112
1895.	2,716,155	122,776	172,717	118,479	292,915	72,493	...	25,458	...	1,737	17,289	3,540,019	1,119,621	162,276	211,407	773,675	15,458
1896.	3,037,920	141,185	177,259	115,386	262,681	79,017	...	26,257	...	...	22,993	3,863,698†	1,182,051	389,842	191,080	524,420	93,212
1897.	3,142,497	131,629	185,533	124,778	365,550	92,792	...	12,043	...	...	11,472	4,066,294	1,328,120	731,742	390,979	210,257	47,016
1898.	3,622,090	149,709	200,329	134,726	394,622	85,862	...	13,372	511	...	6,975	4,608,196	1,418,241	737,689	490,290	297,076	84,209
1899.	4,035,265	156,576	225,623	164,569	491,216	81,835	...	15,822	4,249	...	8,105	5,093,260	1,560,771	672,311	467,906	406,451	112,064
1900.	4,978,492	172,842	216,786	164,489	469,291	74,083	...	23,281	9,250	...	10,228	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939
1901.	5,487,585	191,576	254,100	164,362	421,218	67,730	...	24,656	12,094	...	12,466	6,635,727	1,956,631	1,157,892	845,953	112,519	79,108
1902.	6,259,236	196,981	221,096	171,538	455,424	55,373	1,138	33,889	16,503	...	13,302	7,424,480	2,091,992	974,602	728,916	198,574	20,773
1903.	6,403,503	159,066	239,328	193,277	362,733	43,704	999	46,909	21,764	...	9,306	7,480,589	2,203,889	1,235,318	723,873	133,711	30,429

Information is not available.

* Up to 1893 figures in this column relate to official years and exclude exports to Burma ports.
† Including 1,000 tons produced in the United Provinces of Agra and Oudh in 1896.

APPENDIX 29.

(Appendix 30 in Report for 1902.)

Collieries owned and worked by Railways or the State.

Particulars.	Kurhurbaree and Serampore.		Warora.		Dandot.		Khost.		Haranpur Pressed Fuel Factory.		Remarks.
	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	
Name of owner	East Indian Railway.		State		North State	Western Railway.	North State	Western Railway.	North Western Railway.	State	
Capital outlay . . Rs.	* 16,85,576	* 19,11,613	15,25,388	14,68,525	1,85,460	1,90,094	2,65,746	3,37,171	71,935	83,284	* Approximate. The outlay is made up of the purchase money, Rs. 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the Capital expenditure incurred from 1st January 1880.
Output — Large coal. Tons	513,778	513,774	120,397	100,745	37,402	†30,559	16,288	15,871	...	...	† Steam coal. ‡ Nut coal. § Dust and mixed coal.
Output — Small coal. Tons	38,513	24,166	32,939	26,878	3,431	‡2,374	1,470	‡1,425	...	...	
Output — Slack coal. Tons	56,498	62,151	...	...	14,552	10,758	8,184	§19,149	...	...	
Output — Total. Tons	613,789	600,091	153,336	127,623	55,385	43,691	25,942	36,445	‖6,410	‖5,857	‖ Pressed fuel.
Quantity issued . Tons	576,882	587,327	153,336	127,623	55,384	43,691	25,982	36,445	‖6,410	‖5,857	
Earnings . . Rs.	11,99,981	10,85,816	7,00,028	5,92,484	3,62,161	2,80,988	2,77,631	3,57,055	64,095	58,572	
Working expenses . Rs.	11,99,981	10,85,816	4,38,998	3,99,238	3,64,321	3,24,768	2,58,983	2,99,674	61,259	54,475	
Net earnings . . Rs.	...	...	2,61,030	1,93,246	—2,160	—43,780	18,648	57,381	2,836	4,097	
Percentage on Capital .	...	...	17·11	13·16	...	...	7·01	17·02	3·94	4·92	
Average No. of persons employed daily.	8,500	8,464	1,287	1,235	1,569	1,403	639	648	15	15	
Number of tons raised per person employed.	72	70	119	103	36	31	41	56	2	2	
Number of persons killed.	2	3	1	1	1	1	4	1	...	...	
Number of persons injured.	42	36	5	2	12	10	5	1	1	1	

APPENDIX 30.

(Appendix 38 in Report for 1902.)

Accidents and casualties to trains on railways treated as one System during the Calendar years 1902 and 1903.

(Referred to in paragraph 32 of Report.)

Description.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, *i. e.*, serious accidents.		Other accidents.		Total number of accidents.		Number of passengers and others.				Number of servants.				Total of all classes.			
							Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.
1. Collisions between passenger trains or parts of passenger trains	4	6	3	5	7	11	...	16	32	44	...	1	1	3	...	17	33	47
2. Collisions between passenger trains and goods or mineral trains, engine and vehicles standing foul of the line	39	23	34	28	73	51	2	§24	53	36	7	4	30	13	9	28	83	49
3. Collisions between goods trains or parts of goods trains	11	10	33	56	44	66	...	2	...	...	11	2	29	19	11	4	29	19
4. Collisions between light engines	1	4	13	22	14	26	...	...	...	...	...	1	1	3	...	1	1	3
5. Passenger trains or parts of passenger trains leaving the rails	72	76	62	75	134	151	31	1	37	8	...	...	5	...	31	1	42	8
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	7	3	231	216	238	219	...	...	...	...	1	1	5	...	1	1	5	...
7. Trains or engines travelling in the wrong direction through points	11	17	95	114	106	131	...	*1	†7	§10	1	...	3	9	1	1	10	19
9. Trains running into stations or sidings at too high a speed	3	3	27	19	30	22	...	...	10	...	...	...	1	6	...	...	11	6
9. Trains running over cattle on the line	14	18	2,469	2,565	2,483	2,583	*3	*1	*5	§3	...	3	1	11	3	4	6	14
10. Trains running over obstructions on the line	19	12	121	133	140	145	*2	*2	*4	*2	...	...	2	3	2	2	6	5
11. Trains running through gates at level-crossings	3	2	32	43	35	45	*1	...	...	...	...	...	1	1	1	...	1	1
12. The bursting of boilers of engines	...	...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
12. (*a*) The bursting of tubes, etc., of engines	...	3	313	260	313	263	...	...	...	...	...	...	...	5	...	...	...	5
13. The failure of machinery, springs, etc, of engines	3	4	752	774	755	778	...	...	...	1	...	...	1	...	...	...	1	1
14. The failure of tyres	1	...	4	10	5	10	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	...	1	5	8	5	9	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	18	11	53	77	71	88	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus	...	...	6	6	6	6	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	4	5	340	327	344	332	6	2	15	16	4	...	4	1	10	2	19	17
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	1	2	2	2	3	4	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	1	1	207	149	208	150	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way	29	39	91	119	120	158	75	...	6	...	4	...	...	2	79	...	6	2
22. Slips in cuttings or embankments	10	6	52	27	62	33	...	...	...	...	...	...	...	1	...	...	...	1
23. Fire in trains	4	3	215	240	219	243	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts	8	4	73	72	81	76	*7	**7	*1	†3	4	...	...	*1	11	7	1	4
25. Other accidents	23	40	632	583	655	623	13	‡5	§27	*1	5	3	11	16	18	8	38	17
Total	286	298	5,866	5,931	6,152	6,224	‖140	††61	‖197	‡‡24	37	15	95	94	177	76	292	218

* Not passengers.
† Of these, two were not passengers.
** Of these, four were not passengers.
§ Of hese, one was not a passenger.
‖ Of these, thirteen were not passengers.
†† Of these, eleven were not passengers.
‡‡ Of these, seven were not passengers.

Appendix 31.

Railway Servants and Provident Fund.

[Appendix 39 in

Numerical Return of Servants of all races employed on each railway system (open lines only) and

(Referred to in paragraphs

Number.		Railway System.	Number of servants employed.							
			Europeans.		Eurasians.		Natives.		Total.	
Main head.	Sub-head.		1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.
1	...	Bengal Central	8	11	14	12	1,461	1,538	1,483	1,561
2	...	Bengal-Nagpur	313	393	587	695	†16,765	20,409	†17,665	21,497
3	(*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India	†215	229	†261	256	†14,307	15,041	†14,783	15,526
4	...	Eastern Bengal State	224	366	410	422	21,460	22,015	22,154	22,748
5	...	East Indian	1,512	1,438	956	905	74,554	70,629	77,022	72,972
6	...	Great Indian Peninsula	969	1,001	950	957	53,705	54,253	55,624	56,211
7	...	Madras	243	254	1,472	1,501	20,880	22,103	22,595	23,858
8	...	Nizam's Guaranteed State	88	82	†393	361	†7,503	7,612	7,984	8,055
9	...	North Western State	810	821	647	700	52,437	53,912	53,893	55,434
10	...	Oudh and Rohilkhand State	266	275	203	286	16,717	18,478	17,191	19,039
11	...	Assam-Bengal	53	53	121	120	5,127	5,185	5,301	5,358
12	...	Bengal and North Western	155	154	188	169	18,028	17,065	18,371	17,388
13	...	Bengal-Dooars	4	6	5	4	808	885	817	895
14	...	Bhavnagar-Gondal-Junagad-Porbandar	14	11	24	29	2,588	2,516	2,626	2,556
15	...	Burma	135	182	484	597	12,038	13,209	12,657	13,988
16	...	Deoghar	...	...	1	1	†61	62	†62	63
17	...	Dibru-Sadiya	9	10	...	...	895	879	904	889
18	...	Jodhpur-Bikaner	13	13	3	4	3,108	3,244	3,124	3,261
3	(*g*) to (*l*)	Rajputana-Malwa	†445	420	†542	538	†23,525	24,230	†24,512	25,808
19	...	Rohilkund and Kumaon	26	24	16	16	3,326	2,964	3,368	3,004
20	...	South Indian	104	110	578	624	12,565	13,350	13,247	14,084
21	...	Southern Mahratta	175	179	396	426	13,414	13,841	13,985	14,446
22	...	Udaipur-Chitor	2	2	...	...	358	366	360	368
24	...	Barsi Light	1	1	2	2	185	188	188	191
25	...	Bukhtiarpore-Bihar Light	...	2	...	...	...	101	...	103
28	...	Kalka-Simla	...	15	...	...	...	327	...	342
30	...	Morvi	1	1	1	2	503	492	505	495
31	...	Ranaghat-Krishnagar Light	2	1	...	...	104	105	106	106
33	...	Tarakeshwar-Magra Light	...	...	1	1	201	213	202	214
34	...	Tezpore-Balipara Light	2	2	2	2	176	178	180	182
36	...	Darjeeling-Himalayan	20	21	8	10	936	958	964	989
37	...	Howrah-Amta Light	3	3	1	1	317	319	321	322
38	...	Howrah-Sheakhala Light	1	1	...	...	110	93	111	96
39	...	Jorhat	2	1	...	...	193	205	195	206
		Total	5,875	6,022	8,271	8,661	379,355	387,566	392,501	402,249

* Excludes bonus for the second-half of the year.
† Revised figures.
‡ The number under "Voluntary" represents subscribers over 5 per cent.
§ Approximate.
‖ Information not furnished.
¶ Includes transactions of the Godhra-Rutlam-Nagda railway.

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Appendix 31.

Railway Servants and Provident Fund.

Report for 1902.)

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1903.

35 and 38 of Report.)

Amount deposited in Provident Fund.						Railway system.	Number.	
Number of depositors.		Amount at credit on the 31st December 1903.						
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.		Main head.	Sub-head.
		Rs.	Rs	Rs.	Rs.			
...	361	...	62,917	35,609	98,526	Bengal Central	1	...
180	3,211	44,569	7,50,167	*5,55,770	13,50,497	Bengal-Nagpur	2	...
...	2,795	...	16,60,499	14,38,989	30,99,488	Bombay, Baroda and Central India.	3	(a) to (f) & (m) & (n).
123	4,584	21,257	10,35,680	9,12,936	19,69,873	Eastern Bengal State	4	...
†87,056	†88,962		‖	‖	§1,19,33,861	East Indian	5	...
5	7,281	1,260	76,90,086	...	§76,91,346	Great Indian Peninsula	6	...
76	5,606	92,153	13,33,710	10,49,330	24,75,193	Madras	7	...
...	1,218	...	4,17,255	3,57,440	7,74,695	Nizam's Guaranteed State	8	...
372	6,937	87,622	27,97,278	24,96,821	53,31,721	North Western State	9	...
95	2,515	26,447	7,07,301	5,87,086	13,20,834	Oudh and Rohilkhand State	10	...
...	890	...	1,48,156	87,940	§2,36,096	Assam-Bengal	11	...
5	1,990	1,060	6,47,952	5,97,678	12,46,690	Bengal and North-Western	12	...
...	129	...	15,882	11,302	27,184	Bengal Dooars	13	...
143	461	35,125	1,73,335	1,26,617	3,35,077	Bhavnagar-Gondal-Junagad-Porbandar.	14	...
...	2,521	...	6,55,248	5,05,661	11,60,909	Burma	15	...
...	...	...	...	...	...	Deoghur	16	...
...	...	...	...	...	...	Dibru-Sadiya	17	...
30	347	5,058	57,984	51,677	1,14,719	Jodhpur-Bikaner	18	...
319	3,530	66,982	14,73,891	13,51,705	¶28,92,578	Rajputana-Malwa	3	(g) to (l).
3	439	231	1,26,407	1,09,119	2,35,757	Rohilkund and Kumaon	19	...
8	2,469	2,584	9,11,399	4,84,451	13,98,434	South Indian	20	...
...	3,349	...	10,21,450	4,79,878	15,01,328	Southern Mahratta	21	...
...	35	...	4,632	2,375	7,007	Udaipur-Chitor	22	...
...	...	...	...	...	...	Barsi Light	24	...
...	15	...	134	...	134	Bukhtiarpore-Behar Light	25	...
...	...	...	...	...	...	Kalka-Simla	28	...
...	...	...	...	...	...	Morvi	30	...
...	19	...	828	333	1,161	Ranaghat-Krishnagar Light	31	...
...	...	...	...	...	...	Tarakeshwar-Magra Light	33	...
...	...	...	...	...	...	Tezpore-Balipara Light	34	...
...	131	...	1,34,116	68,267	2,02,383	Darjeeling-Himalayan	36	...
...	101	...	6,840	2,736	9,576	Howrah-Amta Light	37	...
...	23	...	1,376	551	1,927	Howrah-Sheakhala Light	38	...
9	25	870	4,331	2,358	7,559	Jorhat	39	...
8,424	59,924	3,85,209	2,18,38,854	1,13,16,629	4,55,24,553	Total.		

and that under "Compulsory" subscribers of 5 per cent. only.

Appendix 32.
Volunteers.

APPENDIX 32.

(Appendix 40 in Report for 1902.)

Number of men enrolled in Railway Volunteer Corps on the 31st December 1903.

(Referred to in paragraph 36 of Report).

Number.		Corps.	Enrolled strength.						Sergeant Instructors furnished by the Army.	Remarks.
			Efficients.			Non-efficients.	Total number of volunteers in corps.	Total number of European and Eurasian employés on railway.		
Main head.	Sub-head.		Officers.	Non-Commissioned officers.	Volunteers.					
2	...	Bengal-Nagpur	31	131	752	174	1,088	1,088	9	
3	(*a*), (*c*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	20	98	497	...	*615	485	5	* Includes 246 Goanese and 38 Jews, etc.
4	...	Eastern Bengal State	3	26	119	†517	665	728	4	† The large number of non-efficients due to the date of closing the volunteer season being the 31st March.
5	...	East Indian	65	173	1,841	34	2,113	2,343	17	
6	(*a*) and (*f*).	Great Indian Peninsula—								
		First Battalion, Great Indian Peninsula Railway Volunteer Rifles	33	92	957	1	‡1,083		10	‡ Includes 81 Goanese in the Band.
6	(*b*) to (*e*).	Indian Midland—						1,958		
		Second Battalion, Great Indian Peninsula Railway Volunteer Rifles	12	54	374	13	453		3	
7	...	Madras	28	101	759	179	1,067	1,755	11	
8	...	Nizam's Guaranteed State—								
		Hyderabad Volunteer Rifles	9	31	208	...	248	443	3	
9	...	North Western State—								
		Third Punjab (North Western State Railway) Volunteer Rifles	32	119	1,067	11	1,249	1,521	12	
10	...	Oudh and Rohilkhand State—								
		Oudh Volunteer Rifles	27	49	233	157	466	561	4	
11	...	Assam-Bengal	15	28	207	...	§250	173	3	§ Includes employés on construction works.
12	...	Bengal and North-Western	18	55	246	7	‖326	323	6	‖ Includes 6 Parsees, 3 West Indians and 4 Goanese.
14	...	Bhavnagar-Gondal-Junagad-Porbandar—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	1	7	24	6	¶35	40	1	¶ Includes 12 Goanese and 3 Jews.
15	...	Burma	25	90	622	9	746	779	9	
3	(*b*) and (*g*) to (*l*).	Rajputana-Malwa—								
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	33	90	632	4	759	978	10	
19	...	Rohilkund and Kumaon—								
		Bengal and North-Western Railway Volunteer Rifle Corps	...	1	23	...	24	40	**	**The Sergeant-Instructor of "C" Company, Bengal and North-Western Railway Volunteers at present performs the duties.
20	...	South Indian	12	76	389	69	546	734	8	
21	...	Southern Mahratta	19	112	542	...	††673	605	7	†† Includes 166 Goanese.
30	...	Morvi—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	...	...	3	...	3	3	‡‡	‡‡ The Sergeant-Instructor of the Bhavnagar-Gondal-Junagad-Porbandar Railway is also attached to the Morvi Railway.
33	...	Tarakeshwar-Magra	...	...	§§1	...	1	1	...	§§ Attached to the East Indian Railway Volunteer Rifles.
36	...	Darjeeling-Himalayan—								
		Northern Bengal Mounted Rifles, "A" and "B" Troops.	...	...	16	1	17	31	...	
		Total	403	1,333	9,509	1,182	12,427	14,589	122	

N.B.—European and Eurasian employés on railways which have no volunteer corps are excluded from this statement.

APPENDIX 33.

(Appendix 41 in Report for 1902.)

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods traffic for the Calendar year 1903.

(Referred to in paragraph 37 of Report.)

Number.		Railway system.	Subordinate officers.	Constables and men.	Portion of the total annual cost borne by the Railway.				Cost of force to the railway per mile open.	Compensation payments on account of claims for goods traffic.	Remarks.
Main head.	Sub-head.				Supervision.	Constables and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	...	Bengal Central . . .	3	24	4,694	4,962	499	10,155	81·23	3,450	
2	...	Bengal-Nagpur . . .	53	527	14,860	35,280	1,867	52,007	28·02	4,036	
3	(*a*), (*c*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India.	71	497	26,098	63,775	8,768	98,641	115·78	21,082	
4	...	Eastern Bengal State . .	78	733	615	48,400	107	49,122	47·07	10,551	
5	...	East Indian	64	1,872	55,808	1,31,642	39,471	2,26,921	103·22	1,02,341	
6	...	Great Indian Peninsula . .	33	1,350	60,454	1,18,212	18,323	1,96,989	70·13	1,31,768	
7	...	Madras	22	562	14,925	65,442	8,990	89,357	60·14	5,614	
8	...	Nizam's Guaranteed State .	3	389	17,490	44,654	2,446	64,590	87	1,073	
9	...	North Western State . .	...	1,350	...	1,23,569	778	1,24,347	32·07	41,500	
10	...	Oudh and Rohilkhand State .	11	558	5,249	35,864	2,375	43,488	38·44	19,559	
11	...	Assam-Bengal	3	175	2,136	13,337	1,054	16,527	24·46	2,831	
12	...	Bengal and North-Western .	14	556	2,372	44,926	3,647	50,945	38·31	5,180	
13	...	Bengal Dooars	...	3	...	770	...	770	5·03	898	
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	26	123	16,787	11,579	6,458	34,824	76·46	134	
15	...	Burma	93	414	21,024	66,328	24,147	1,11,499	83·40	6,391	
16	...	Jodhpur-Bikaner . . .	3	36	1,726	3,285	483	5,494	6·67	9,706	
3	(*b*) & (*g*) to (*l*).	Rajputana Malwa . . .	128	647	33,341	78,834	10,866	1,23,091	60·82	27,525	
19	...	Rohilkund and Kumaon . .	11	142	1,631	11,255	1,571	14,457	43·75	1,692	
20	...	South Indian	...	221	...	*56,290	...	56,290	43·47	2,727	* Including cost of Government supervision, Rs. 42,634.
21	...	Southern Mahratta . . .	14	719	28,267	94,103	7,882	1,30,252	81·65	6,335	
24	...	Barsi Light	1	4	...	790	23	813	37·66	2,875	
30	...	Morvi	3	12	772	1,232	596	2,600	27·65	22	

Appendix 34.
Fine Funds.

APPENDIX 34.

(Appendix 42 in Report for 1902.)

Transactions of the Fine Funds for the Calendar year 1903.

(Referred to in paragraph 39 of Report.)

Number.		Railway system.	Assets.				Disbursements.						Balance on 31st December 1903.
Main head.	Sub-head.		Balance on 31st December 1902.	Fines and bones forfeited during 1902.	Interest on balance.	Total.	Hospitals for sick employés.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	Bengal Central	3,823	1,076	127	5,026	...	...	...	...	21	21	5,005
2	...	Bengal-Nagpur	14,771	13,894	209	28,874	...	...	300	5,170	5,992	11,462	17,412
3	(*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India	*11,990	3,156	378	15,524	50	1,006	50	1,510	689	3,305	12,219
4	...	Eastern Bengal State	8,554	12,195	240	20,989	...	406	2,619	6,173	3,085	12,283	8,706
5	...	East Indian	*77,893	20,664	3,024	1,01,601	...	75	2,643	1,900	681	5,299	96,302
6	...	Great Indian Peninsula	*7,510	13,300	641	21,451	200	1,420	2,291	4,946	4,580	13,437	8,014
7	...	Madras	*1,05,909	9,128	3,666	1,18,703	71	2,892	1,370	211	1,401	5,945	1,12,758
8	...	Nizam's Guaranteed State	4,899	1,924	125	6,948	360	...	1,057	50	307	1,774	5,174
9	...	North Western State	13,948	14,888	198	29,034	100	45	5,000	7,667	3,798	16,610	12,424
10	...	Oudh and Rohilkhand State	25,506	4,922	862	31,290	...	...	3,548	2,143	6,703	12,394	18,896
11	...	Assam-Bengal	9,489	3,654	...	13,143	...	125	600	733	283	1,741	11,402
12	...	Bengal and North-Western	*55,437	18,806	1,035	74,778	...	650	...	6,370	2,191	9,211	65,567
13	...	Bengal Dooars	1,547	494	46	2,087	...	...	...	50	...	50	2,037
14	...	Bhavanagar-Gondal-Junagad-Porbandar	6,049	740	185	6,974	...	...	...	1,217	598	1,845	5,129
15	...	Burma	*10,258	18,355	...	28,613	...	...	2,323	6,084	12,621	21,028	7,585
18	...	Jodhpur-Bikaner	1,963	1,830	...	3,793	...	...	...	45	...	45	3,748
3	(*g*) to (*l*).	Rajputana-Malwa	61,137	9,153	1,902	72,192	...	554	2,798	385	4,737	8,474	63,718
19	...	Rohilkund and Kumaon	66	156	718	940	...	...	...	...	310	310	630
20	...	South Indian	*1,39,797	7,306	4,390	1,51,493	...	1,130	...	2,418	1,073	4,616	†1,46,877
21	...	Southern Mahratta	913	3,792	19	4,724	100	70	859	1,910	1,370	4,309	415
22	...	Udaipur-Chitor	430	52	...	482	...	...	...	150	50	200	282
30	...	Morvi	911	168	...	1,079	...	77	...	...	3	80	999
33	...	Tarakeshwar-Magra	*1	58	...	59	59	...	...	...	...	59	...
36	...	Darjeeling-Himalayan	*180	111	...	291	...	...	...	100	2	102	189
39	...	Jorhat	209	96	6	311	...	...	...	...	...	...	311

* Revised figures.
† Approximate.

APPENDIX 35.

(Appendix 43 in Report for 1902.)

Railway and Railway Aided Schools at the close of the Calendar year 1903.

(Referred to in paragraph 40 of Report.)

N.B.—A reference to Appendix 1 will furnish the key to the letters used to denote railways.

Number. Main head.	Number. Sub-head.	Railway system.		RAILWAY SCHOOLS. Number of schools.	Attendance. Children. Number on the rolls.	Attendance. Children. Average daily attendance.	Attendance. Apprentices and workmen. Number on the rolls.	Attendance. Apprentices and workmen. Average daily attendance.	Annual contributions. By Government.	Annual contributions. By Railway. From Revenue.	Annual contributions. By Railway. From Fine Fund.	Annual contributions. By school fees.	Annual contributions. Total.	Annual expenditure.	RAILWAY AIDED SCHOOLS. Number of schools.	Average daily attendance. Children.	Average daily attendance. Apprentices and workmen.	Annual Railway Grant. From Revenue.	Annual Railway Grant. From Fine Fund.
									Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.
2	...	B. N.	European	5	171	138	...	...	1,215	3,199	...	2,816	7,230	6,783	4	133	...	900	...
			Native	3	203	171	...	...	178	899	300	1,105	2,482	2,990	...	...	...	...	...
3	(*a*) to (*f*) & (*m*) & (*n*).	B. B. & C. I.	European	*4	127	95	22	18	1,252	5,190	50	1,983	8,475	8,284	17	47	...	3,136	...
4	...	E. B. S.	European	...	...	...	...	...	...	...	...	...	...	...	4	105	...	1,962	1,962
			Native	5	95	71	278	81	...	1,593	...	...	1,593	1,593	11	440	...	657	657
5	...	E. I.	European	†16	811	732	55	47	12,103	‡28,586	§2,108	79,990	1,22,787	99,782	3	132	...	1,926	...
			Native	59	3,162	2,159	2,578	1,026	3,533	3,702	2,643	21,803	31,681	29,110	...	...	...	...	...
6	(*a*)	G. I. P.	European	6	216	175	...	...	2,769	12,860	1,673	2,101	19,403	19,403	‖ 15	¶	¶	5,451	...
			Native	...	...	...	...	...	...	...	...	...	...	...	1	¶	¶	240	...
6	(*b*) to (*f*)	I. M.	European	2	119	70	...	...	...	4,507	578	1,016	6,101	6,101	...	...	...	...	...
			Native	...	...	...	...	...	...	...	...	...	...	...	2	¶	¶	541	40
7	...	M.	European	8	385	290	...	...	5,371	10,171	1,091	3,790	20,423	21,247	5	81	...	1,005	279
8	(*a*) & (*b*)	N. G. S.	European	1	47	39	...	...	...	1,416	...	423	1,839	1,117	3	123	...	240	554
			Native	1	34	25	9	6	...	936	...	23	959	839	5	337	...	...	503
9	...	N. W.	European	2	61	43	43	28	1,810	1,934	**346	880	4,970	4,668	15	297	...	12,134	**2,166
			Native	24	133	105	1,372	438	...	5,809	**88	283	6,180	4,997	4	123	...	1,667	**298
10	...	O. & R.	European	4	56	45	38	33	1,548	1,394	1,694	1,022	5,658	4,636	16	80	...	6,065	1,123
			Native	3	2	2	219	70	...	332	34	...	366	366	2	113	...	...	697
11	...	A. B.	European	1	14	10	...	...	225	...	600	158	983	1,176	...	...	...	...	...
12	...	B. & N. W.	European	2	70	55	...	...	647	1,766	...	853	3,266	3,665	...	...	...	...	...
			Native	...	...	...	...	...	...	...	...	...	...	...	2	55	...	324	...
14	...	B. G. J. P.	European	1	11	14	...	...	...	147	...	297	444	1,362	...	...	...	...	...
			Native	1	42	32	...	...	...	350	...	76	426	497	...	...	...	...	...
15	...	B.	European	3	55	49	13	7	1,516	78	678	1,343	3,615	2,640	15	33	...	290	290
			Native	3	178	150	29	23	1,276	533	1,013	2,856	5,678	4,199	12	35	...	342	342
17	...	D. S.	European	1	129	103	...	...	...	300	...	987	1,287	1,702	...	...	...	...	...
8	(*c*)	H. G. V.	Native	1	11	10	...	...	...	420	...	67	487	374	...	...	...	...	...
3	(*g*) to (*l*)	R. M.	European	9	361	178	92	82	2,629	4,891	1,362	5,347	14,229	14,346	1	65	...	...	180
			Native	2	...	...	47	43	...	224	147	...	371	371	4	261	...	302	1,109
20	...	S. I.	European	4	159	149	...	...	1,083	4,587	...	929	6,599	4,715	...	...	...	...	...
			Native	1	34	34	...	...	53	331	...	174	608	390	...	...	...	...	...
21	...	S. M.	European	8	249	193	...	...	976	5,100	120	1,620	7,816	7,853	7	85	...	...	659
			Native	8	30	22	181	71	...	1,025	...	111	1,136	1,128	1	263	...	...	80
			Total	188	6,965	5,159	4,976	1,973	38,175	1,02,330	14,475	1,32,053	2,87,033	2,56,784	149	2,813	...	37,182	10,939

* Includes an apprentice class for Europeans and Natives.

† Includes the joint railway schools at Aligarh, Moghal Sarai and Ghaziabad.

‡ Includes Rs. 672 received from the North Western State railway for the joint railway school at Ghaziabad, Rs. 300 and Rs. 156 received from the Oudh and Rohilkhand State railway for the joint railway schools at Aligarh and Moghal Sarai respectively, and Rs. 11,822 received from the North Western State railway for the "Oakgrove School," Mussoorie.

§ Amount received from the Fine Fund of the North Western State railway for the "Oakgrove School," Mussoorie.

Includes 10 schools for Europeans and Natives.

¶ Information not furnished.

** In addition to these grants from the Fine Fund, the North Western State railway also subscribed Rs. 2,108 from the Fine Fund for the "Oakgrove School" at Mussoorie, particulars of which are included with the East Indian railway schools and Rs. 44 to the "Cathedral Orphanage," Lahore.

Appendix 36.
Cost of bridges.

Cost and particulars of the railway bridges in India of 1,000 feet length and

(Referred to in para

Railway.	Serial No. of bridges.	Name of bridge.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder level.
(5′ 6″ gauge.)					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
2 (a)—Bengal-Nagpur.	1	Kanhan (near Kamptee)	1st Sept. 1887	6 2	170·00 60·00	1,237·00	9 to 26	50·00	1,061·10	4,29,917
	2	Weinganaga (near Tumsar Road).	29th April 1889	9	150·00	1,450·00	21	54·00	1,234·47	(a)7,50,810
	3	Sheonath No. II (near Nipania	31st May 1889	14	150·00	2,250·00	6 to 12	57·00	1,912·40	4,93,433
	4	Eeb (near Jharsuguda)	1st Aug. 1890	9	150·00	1,461·00	42 to 55	38·00	1,229·40	2,63,515
	5	Damoodar (near Damoodar)	12th June 1890	10 2	200·00 100·00	2,340·00	74·22	40·75	2,330·00	3,67,338
	6	Rushu Kulya (near Chatrapur).	1st Sept. 1895	10	150·00	1,598·00	70·00	23·00	1,437·25	3,33,096
	7	Subanrika (near Jellasore)	6th Mar. 1899	11 2	150·00 60·00	1,908·00	65·00	30·00	1,553·00	5,14,186
	8	Byturney (near Jajpore Road)	15th Oct. 1899	15	150·00	2,400·00	73·01	27·73	2,173·00	4,95,511
	9	Brahmini (near Jenapur)	15th Oct. 1899	29	150·00	4,640·00	78·06	31·83	4,162·00	10,43,265
	10	Berupa (near Cuttack)	15th Oct. 1899	16	100·00	1,728·00	45·18	32·96	1,172·80	3,41,667
	11	Mahanadi (near Cuttack)	11th Mar. 1900	64	100·00	6,912·00	68·80	28·54	4,691·21	15,11,654
	12	Kuakhai (near Cuttack)	2nd April 1900	19	150·00	3,212·00	80·73	36·32	2,870·00	7,67,512
	13	Kathjori (near Cuttack)	2nd April 1900	18	150·00	2,890·00	80·81	40·32	2,563·00	7,35,617
	14	Roopnarain (near Kolaghat)	19th April 1900	7 4	300·00 100·00	2,632·00	88·00	39·75	4,163·00	27,30,815
	15	Cossye-Midnapur (near Khargpur).	1st Feb. 1900	16	100·00	1,736·00	70·00	34·40	1,168·00	(c)3,95,464
3 (a)—Bombay, Baroda and Central India.	16	Nerbudda (near Broach). Old	23rd June 1861	25	183·50	4,687·50	76	48·50	4,650·00	23,21,000
		New	16th May 1881							
	17	Tapti (near Amroli)	19th Nov. 1860	30	60·00	1,875·00	20	50·50	1,950·00	...
4 (a)—Eastern Bengal.	18	Gorai (near Kumarkhali)	1st Jan. 1871	7 9 2	174·71 43·69 18·00	1,759·00	75 to 95 22 22	53·17 49·58	1,645·00 154·00	...
5 (a)—East Indian.	19	Soane (near Koilwar)	22nd Dec. 1862	28	150·00	4,726·00	32	35·60	3,702·60	...
	20	Jumna (near Allahabad)	15th Aug. 1865	14 2	200·00 30·00	3,150·00	42	58·75	4,300·00	29,86,000
	21	Jumna (near Delhi)	1st Jan. 1867	12 2	211·50 30·00	2,697·00	7 to 39	24·00	3,491·00	5,28,475
	22	Jubilee (over the Hooghly, between Hooghly station on the E. I. R. and Naihati on the E. B. S. R.)	15th Mar. 1887	2 1	523·67 106·50	1,213·25	98·50	55·00	3,460·15	(m) 10,71,653
		Do. Approach viaducts Naihati		29 35 74	10·83 10·83 29·17	442·00	...	...	...	...
		Do. Approach viaducts Hooghly		1 1 1	25·83 43·00 48·00	3,278·00	...	...	...	...

DIX 36.

in Report for 1902.)

Appendix 36.
Cost of bridges.

over and costing not less than Rs. 6,00,000 each up to the 31st December 1903.

graph 31 of Report.)

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No. of bridges.	Remarks.
Rs.	Rs.	Rs.	Rs.	Rs.		
2,84,040	...	7,13,957	577	Not known	1	No separate sub-head of erecting and painting given in the completion reports.
(*b*)2,42,833	...	9,93,643	685	19	2	Has been converted from 3′ 3⅜″ to 5′ 6″ gauge and expenditure represents cost of the bridge as a 5′ 6″ gauge one. The 3′ 3⅜″ gauge was opened on the 7th June 1882 and 5′ 6″ gauge on the 29th April 1889.
3,90,160	...	8,83,593	393	89	3	(*a*) Includes the cost of the old 3′ 3⅜″ gauge bridge (Rs. 6,74,612). (*b*) Actual cost of girders only.
3,42,958	23,856	6,30,329	415	...	4	
6,27,561	44,107	10,39,006	421	62·47	5	
3,41,642	41,453	7,16,191	422	57	6	
4,15,862	...	9,30,048	487	69	7	
4,91,539	39,124	10,26,174	411	33	8	
9,65,685	1,32,782	21,41,732	433	34	9	
2,79,352	26,863	6,47,882	359	40	10	
11,77,784	1,02,346	27,91,784	388	35	11	
7,13,244	46,427	15,27,183	461	35	12	
6,38,133	36,705	14,10,455	475	33	13	
12,06,623	...	39,37,438	1,496	86	14	
2,57,477	4,161	6,57,102	376·12	43	15	(*c*) Excluding cost of protective works (Rs. 4,161).
12,58,929	(*d*) 5,92,643	(*e*) 41,72,572	764	49	16	The figures as to cost refer to the new bridge only; the cost of the old bridge is not known. (*d*) Including some special items not separately detailed. (*e*) Excluding cost of the approaches.
...	...	(*f*) 12,13,569	647	...	17	(*f*) Including Rs. 5,948, being the cost of raising rail-level on up and down lines and Rs. 3,05,539 on account of the renewal of Warren girders with 60 feet plate girders.
...	...	(*g*) 14,83,750	830	...	18	(*g*) Including Rs. 22,618 charged to Revenue, and Rs. 879 charged to Capital, for the protection of piers. The cost is approximate.
(*h*) 10,33,324	...	(*i*) 43,33,324	917	79	19	Has the rails above and the roadway below. The roadway was subsequently doubled. (*h*) Represents the cost of the second line only. (*i*) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed, as well as the cost of iron work for the first line.
(*j*) 14,63,300	...	(*k*) 44,46,300	1,412	110	20	The substructure of this bridge is for a double line, but the girders are erected for a single line only. It has the rails above and the roadway below. (*j*) Of this amount Rs. 13,13,000 represents the cost of girders, and Rs. 1,47,300, the cost of upper and lower roadways. (*k*) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed.
10,49,779	...	(*l*) 16,60,335	616	74	21	The girders of this bridge are erected for a double line. It has the rails above and the roadway below. (*l*) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed.
21,78,852	1,21,184	33,71,689	2,679	(*n*) 350		(*m*) Including charges on account of plant, Rs. 3,81,544, and supervision Rs. 3,19,466. (*n*) Estimated.
...	...	64,611	147	...	22	The approach viaducts are brick arches.
...	...	4,80,263	147	...		

Appendix 36.
Cost of bridges.

Cost and particulars of the railway bridges in India of 1,000 feet length and

(Referred to in para.

RAILWAY.	Serial No. of bridges.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
5′ 6″ gauge—*contd.*					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
5 (*a*)—East Indian—*concld.*	23	Barakar (near Barakar)	4th Sept. 1893	1 5 6 5	200·00 150·00 100·00 (*a*) 29·25	(*b*)1,850·00	(*c*)5 to 85 (*d*)	(*e*)	1,307·00	4,13,002
	24	Sone (near Dehri)†	22nd Feb. 1900	93	100·00	10,952·00	38·00	26·50	6,510·00	14,28,857
	25	Tonse (near Meja Road)	4th April 1861	7 2	150·00 32·00	1,194·00	27·75	59·67	1,207·00	8,74,865
5 (*c*)—South Behar.	26	Phulgu (near Manpur)	3rd July 1899	18 1	100·00 30·00	2,064·00	45·00	18·00	1,520·00	5,74,661
6 (*a*)—Great Indian Peninsula.	27	Kistna (near Krishna)	9th Oct. 1873	36	100·00	3,855·09	(*h*) 9	48·67	2,556·00	(*i*) 6,11,163
	28	Tapti (near Duskheda)	12th Aug. 1872	5 28	138·00 59·00	2,556·00	15·96	60·33	2,392·00	(*j*) 7,72,163
	29	Nerbudda (near Bikrampur)	8th May. 1870	5 6	137·00 40·00	1,052·00	4·60	81·33	525·00	4,06,032
	30	Girna (near Paldhi)	10th May 1901	9	166·16	1,572·00	48·00	57·00	1,653·00	4,52,221
6 (*b*)—Bhopal-Itarsi.	31	Nerbudda (near Budni)	18th Nov. 1884	14 1	150·00 60·00	2,306·00	4	64·50	1,980·00	3,45,696
6 (*c*)—Indian Midland.	32	Chumbal (near Hetampur)	15th May 1881	12 2	186·00 136·00	2,714·00	75	107·20	3,026·00	17,39,057
	33	Jumna (near Kalpi)	1st Feb. 1888	10	250·00	2,626·00	90	77·00	3,200·00	12,65,842
	34	Betwa (near Orchha)	5th June 1889	13 1	150·00 60·00	2,166·00	13	91·04	1,772·30	8,19,541
	35	Ken (near Banda)	1st Aug. 1889	12 1	100·00 250·00	1,558·00	4	70·82	1,125·30	3,92,243
	36	Betwa (near Basai)	1st Jan. 1889	9	150·00	1,446·00	12	58·14	1,200·86	4,02,749
7 (*a*)—Madras.	37	Cheyer (near Nandalur). Old New.	1st Sept. 1865 1st May 1880	50	64·00	3,500·00	100	14·00	988·00	9,10,924
	38	Tungabhadra (near Tungabhadra).	16th Jan. 1871	36 44	64·00 girders. 29·00 arches.	4,060·00	14	34·00	1,213·00	6,83,088
	39	Penner (near Penneru) Old New.	May 1869 1st Oct. 1889	13	131·00	1,830·00	33 to 54·33	22·00	1,999·00	...
	40	Chitravati (near Kondapuram). Old New.	1st Sept. 1868 6th Mar. 1890	19	131·00	2,670·00	18 to 78	18·00	2,938·00	...
	41	Papaghni (near Kamalapuram). Old New.	Aug. 1866 1st July 1892	20 15	64·00 131·00	1,410·00 2,110·00	.... 52·50 to 62·00	... 15·00	... 2,391·00	... 5,93,030

DIX 36—*continued.*

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Appendix 36.
Cost of bridges.

***over, and costing not less than Rs. 6,00,000 each up to 31st December 1903*—contd.**

graph 31 of Report.)

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No. of bridges.	Remarks.
Rs.	Rs.	Rs.	Rs.	Rs.		
3,79,078	(*f*) 13,726	8,05,806	428	58	23	(*a*) In viaducts. (*b*) From front to front of abutments. (*c*) On rock. (*d*) In sand. (*e*) Deck bridge various; 75 feet to rails. (*f*) Stone round piers only. No training works.
16,85,480	1,18,393	*32,32,730	310	80	24	† The superstructure of this bridge is for a double line, but the girders are erected for a single line only, hanging decked with corrugated steel floor plates. Hand rails on both sides, and a foot way below between girders for inspection. Rails above. * Approximate.
4,54,473	...	(*g*) 14,08,401	1,180	138	25	(*g*) Including Rs. 79,063 on account of cost of flooring.
3,70,681	15,060	‡9,60,402	458	25	26	Has the rails over girders. Pathway below formation, decked with corrugated sheets, girders hanging. ‡ Approximate.
6,61,903	...	12,73,066	330	30	27	The girders are for a single line, and the piers for a double line. (*h*) Nine piers and two abutments are founded above low-water level. (*i*) Including Rs. 25,656, being the cost of other items not separately detailed.
7,90,175	64,910	16,27,248	611	71	28	Carries a double line. (*j*) Including Rs. 95,918, being the cost of other items not separately detailed.
2,63,064	...	6,69,096	636	235	29	The girders are for a single line, and the piers for a double line.
4,62,308	...	9,14,529	582	32	30	Braced N type girders over corrugated iron cylinder piers and a masonry abutment for single line.
5,77,925	...	(*k*) 9,44,171	422	35	31	(*k*) Including some special items not separately detailed.
9,02,295	6,29,683	32,71,035	973	78	32	
11,41,231	1,59,564	25,66,637	917	107	33	The abutments and piers are built for a double line, but the girders are erected for a single line only, with a roadway on the same level, which has been brought into use from the 1st May 1895.
5,74,179	...	13,93,729	643	35	34	
3,39,954	...	7,32,197	471	84	35	
3,59,308	2,615	7,64,672	527	64	36	The abutments are built for a double line.
1,95,689	...	(*l*) 12,45,464	356	...	37	(*l*) Including some special items not separately detailed, but excluding the cost of the old bridge, Rs. 4,06,293.
2,38,970	...	(*m*) 10,54,862	260	54	38	(*m*) Including Rs. 2,99,106, being the expenditure incurred on strengthening the bridge, and some special items relating to original construction not separately detailed.
2,84,610	...	(*n*) 11,32,077	619	...	39	The cost does not include the expenditure incurred on the old bridge, Rs. 1,72,576. (*n*) Includes some special items not separately detailed.
3,85,833	...	(*n*) 13,58,194	509	...	40	The cost does not include the expenditure incurred on the old bridge, Rs. 3,54,705.
...	...	(*o*) 1,62,354	...	...	41	(*o*) Approximate.
3,63,332	38,568	9,94,930	453	(*p*) 12		(*p*) Including superintendence and all charges after girders were unloaded from wagons.

Appendix 36.
Cost of bridges.

Cost and particulars of the railway bridges in India of 1,000 feet length and

(Referred to in para

RAILWAY.	Serial No. of bridges.	Name of bridge.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
5′ 6″ gauge—*contd.*					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
7 (c)—Madras (North-East Line).	42	Penner (near Nellore)	20th Dec. 1893	23 5	70·00 40·00	1,990·00	8·59 to 40·40	39·58 to 42·17	911·75	3,91,961
	43	Kistna (near Bezwada)	17th Mar. 1893 for coal traffic, and 1st Jan. 1894 for metre gauge traffic.	12	292·00	3,736·00 outside and 3,684·00 inside abutments.	82	46·50	6,426·00	16,43,547
	44	Godavari (Havelock) (near Kovvur).	6th Aug. 1900	56 1	150·00 40·00	9,000·00 between abutments. 9,096·00 over all.	43 to 100	34·75	7,668·00	...
	45	Sutlej (near Ladhowal)	January 1870	(a) 4 44 1 1	71·00 99·00 99·67 96·67	5,131·00	28 to 42	20·79	(b)2,314·00	20,97,296
	46	Beas (near Beas)	April 1869	2 32	120·00 100·00	3,828·00	43 to 70	20·00	1,660·00	15,66,476
	47 48	Jumna (near Jagadhri) Kaisar-i-Hind (over the Sutlej near Hussainiwala) (Ferozepore)	January 1869 8th May 1887	22 2 27	99·00 100·00 144·50	2,674·75 4,293·00	39 to 41 78	19·00 21·00	1,308·00 6,000·00	7,64,420 14,48,037
9 (a)—North Western State.	49	Ravi as originally constructed Ravi as reconstructed (near Shahdara).	12th April 1875 15th July 1893	33 15	90·00 90·00	3,217·00 1,465·00	75 75	20·00 19·00	1,419·00 (c)1,331·00	9,50,202 ...
	50	Alexandra (over the Chenab between Wazirabad and Kathala) as originally constructed Alexandra as reconstructed	22nd Jan. 1876 1st Nov. 1891	64 28	133·50 133·50	9,088·00 3,976·00	75 75	20·00 20·00	5,248·00 5,073·40	24,06,756 22,920
	51	Jhelum as originally constructed Jhelum as reconstructed (near Jhelum).	Towards end of 1876. 20th Nov. 1895	50 50 1 land span.	90·00 90·00 18·50	4,874·00 4,899·42	30 30	20·75 22·63	2,150·00 2,475·00	6,90,137 1,79,770
	52	Attock (on the Indus near Attock).	24th May 1883	2 3 2 land spans.	296·25 246·25 40·00	1,522·00	(d)	111·00	2,202·00	14,77,580

DIX 36—*continued.*

in Report for 1902.)

***over, and costing not less than Rs. 6,00,000 each up to 31st December 1903*—contd.**

graph 31 of Report.)

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No. of bridges.	REMARKS.
Rs.	Rs.	Rs.	Rs.	Rs.		
1,83,921	54,668	6,30,545	316	30	42	
18,74,453	5,14,000	40,32,000	942	34	43	Rs. 25,211 since expended on account of repainting girders. The cost of approaches, Rs. 4,71,000, has not been entered.
...	...	47,14,849	518	22	44	(*a*) Twelve spans have been removed. (*b*) Does not include weight of girders removed.
(*c*) 10,03,780	(*d*) 2,54,000	33,60,076 (*f*)	(*e*) 605	(*g*)	45	(*c*) Does not include cost of girders removed. (*d*) Including cost to 1874, since which date a large amount of additional expenditure has been incurred. (*e*) Calculated as for the present length. (*f*) The contract rate for the construction of these three bridges, including protective works, was Rs. 428 per foot run of the bridges, and the figures as to cost are approximate only. (*g*) Contract included erection.
7,23,690	3,00,000	25,90,166	598	(*g*)	46	
5,70,180	2,00,000	15,34,600	499	(*g*)	47	
15,52,329	11,07,900	41,08,266	699	50	48	Carries the rails below and the roadway above.
5,01,641	1,50,472	16,02,315	451	(*h*) 125	49	(*h*) Originally carried the rails above and a footpath below. This has now been changed. (*i*) Including the road bridge (634 tons). (*j*) The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms a corrugated flooring 16 feet wide and a metalled roadway 13′ 8″ clear between guard rails.
1,94,098	96,386	2,90,484	132	(*j*) 40		
19,94,271	9,40,338	53,33,363	484	121	50	The bridge has been reduced from 64 to 28 spans. The girders doubled, and new cross and rail girders put in. The track is carried between the girders and there are foot-paths on cantilevers outside. The cost of reconstruction only is shown against this entry. The bridge was not closed for traffic during reconstruction; all restrictions were removed on the 1st November 1891, and the bridge was thrown open for traffic as usual.
2,45,769	49,381	3,18,070	68	27		
9,40,487	81,243	17,11,872	335	124	51	Originally carried the rails above and a foot-path below. This has now been changed. The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms a corrugated flooring 16 feet wide and a metalled roadway 14′ 6″ between guard timbers.
8,33,242	86,664	10,99,676	207	87		
15,96,980	1,45,956	32,20,016	2,020	497 252	52	Has the rails above and a military roadway below. (*k*) Pier No. 1.—All standard and struts founded at same level, *viz.*, 343·68 or 21·68 feet *above* low-water level. Pier No. 2.—All standards and struts founded at same level, *viz.*, 319·12 or 2·88 feet *below* low-water level Pier No. 3.—Up-steam strut on east side of pier was founded at 311·83 or 10·12 feet *below* low-water level; all other standards and struts founded at same level, *viz.*, 313·30 or 8·70 feet *below* low-water level. Pier No. 4.—Two main standards and one down-steam strut, all on west side of pier, were founded at 337·29 or 15·29 feet above low-water level; all other standards and struts founded at same level, *viz.*, 343·29 or 21·29 feet *above* low-water level.

Appendix 36.
Cost of bridges.

APPEN

(Appendix 48

Cost and particulars of the railway bridges in India of 1,000 feet length and

(Referred to in para

Railway.	Serial No. of bridges.	Name of bridge.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
(5′ 6″ gauge)— *concld.*	53	Empress (over the Sutlej at Adamwahan)	8th June 1878	16	250·00	4,210·00	100	32·07	6,704·00	26,98,885
	54	Victoria (over the Jhelum at Chak Nizam, Haranpur)	16th May 1887	17	135·00	2,720·00	82	19·00	2,988·00	7,73,481
	55	Lansdowne (over the Indus at Sukkur) —								
		Rohri channel	27th Mar. 1889	1	790·00	900·00	None in river	51·00	3,292·00	2,88,320
9 (*a*)— North-Western State— *concld.*				1	270·00					
		Sukkur channel		1	230·00	620·00	6	46·00	1,014·00	1,79,468
				1	90·00					
	56	Sher Shah (over the Chenab near Chenab West bank)	1st Feb. 1890	17	200·00	3,650·00	75	29·00	3,740·00	10,84,453
	57	Indus (near Kotri)	25th May 1900	1	100·00	1,948·00	49 to 60	40·00	4,761·00	6,93,691
				5	350·00					
	58	Sohan	1st April 1899	1	119·00	1,204·50	(*d*)	96·90	1,150·00	5,91,487
				4	200·00					
				2	100·00					
	59	Gumti (near Jaunpur)	24th Dec. 1874	16	82·00	1,472·00	45 to 50	44·17	811·00	4,21,530
				1	55·00					
	60	Ramganga (near Bareilly)	24th June 1874	31	56·00	2,277·00	85	25·77	943·24	4,50,625
				1	72·00					
	61	Ganges (near Rajghat, Aligarh branch)	5th June 1874	1	58·00	3,040·00	55	24·39	1,050·00	3,78,991
				33	80·00					
				23	100·00					
10 (*a*)—Oudh and Rohilkhand State.	62	Ganges (near Cawnpore)	15th July 1875	2	96·00	2,850·00	50 to 65	31·66	1,815·00	7,11,073
				2	40·00					
	63	Ganges (near Balawali)	9th May 1887	11	249·50	2,886·00	100	37·94	3,944·00	10,16,438
	64	Solani (near Landhaura)	1st Jan. 1886	11	149·58	1,749·50	60	16·75	1,563·00	4,03,182
	65	Dufferin (over the Ganges at Benares) (near Kashi)	1st Oct. 1887	7	331·00	3,507·41	25 to 141	75·32	6,780·00	13,04,407
				9	103·00					
	66	Ramganga (near Moradabad)	8th June 1894	10	200·00	2,126·00	75 to 88	21·50	2,602·76	3,26,267
	67	Ganges (near Garhmukhtesar)	11th April 1901	11	200·00	2,332·00	81	28·00	2,574·00	5,21,135
				8	60·00					
(3′ 3½″ gauge.) 11 (*a*)— Assam-Bengal.	68	Barak (near Badarpur)	23rd April 1899	1	276·40	1,368·00	(*f*)	70·21	1,107·00	4,72,410
				1	250·00					
				1	224·00					
	69	Major bridge No. 74, Dehing, at mile 307·57 from Gauhati.	11th May 1903	7	150·69	1,118·00	38·25	40·83	683·00	(*k*) 3,96,923
12 (*a*)— Bengal and North-Western.	70	Rapti (near Jagat Bela)	15th June 1886	9	150·00	1,445·00	86	41·00	1,145·70	4,93,956
	71	Elgin (over the Gogra river near Gogaghat)	24th Dec. 1898	17	200·00	3,695·00	94 to bottom of well curbs, 78 average	28·50	4,199·00	6,80,222
	72	Turtipur (near Turtipur)	15th Jany. 1903	18	200·00	3,911·50		47·50	3,689·00	(*i*) 9,77,236
12 (*c*)— Tirhoot.	73	Gandak (near Hajipur)	25th April 1887	8	250·00	2,176·00	40 to 90	40·46	2,495·00	6,07,133
	74	Kosi (near Kursela)	26th June 1902	15	200·00	3,172·50	95	42·72	3,060·00	14,45,130
15 (*a*)— Burma	75	Gokteik viaduct	1st June 1901	7	60·00	2,260·00	...	300·00	4,241·00	2,33,213
				10	120·00					
				16	40·00					
4 (*c*)— Eastern Bengal State.	76	Teesta (near Teesta)	1st April 1901	13	150·00	2,116·40	60	27·27	1,704·30	3,97,057
	77	Dharlla (near Gitaldaha)	2nd Jany. 1902	10	150·00	1,620·60	75 to 77	26·22	1,290·00	4,12,186
	78	Sankosh (near Pateswari)	23rd Sept. 1902	9	150·00	1,458·00	85	33·08	1,165·59	3,90,079
	79	Mahanady (near Barsoi)	1st July 1889	10	150·00	1,592·00	47·08 to 48·57	30·77	975·00	3,40,185
3 (*k*)— Rajputana-Malwa.	80	Jumna (near Agra Fort)	1st Jan. 1876	16	133·00	2,427·00	70	32·50	2,551·40	4,13,975
				6	23·00					
	81	Nerbudda (near Mortakka)	5th Oct. 1876	14	183·00	(*o*) 2,836·00	14	80·00	2,362·00	9,39,407
	82	Jumna (near Muttra Cantonment)	15th Dec. 1884	7	150·00	1,146·00	71	27·00	1,309·00	3,06,341
21 (*a*)— Southern Mahratta.	83	Bhima (near Tadval)	1st Aug. 1884	14	150·00	2,342·00	18·50	58·77	1,680·00	3,33,256
	84	Kistna (Bijapur branch) (near Sitimani)	1st Aug. 1884	21	150·00	3,392·00	13·00	43·17	2,498·00	3,43,345
	85	Kistna (Poona branch) (near Kudchi)	2nd Feb. 1888	14	150·00	2,339·50	4·17	75·79	1,897·12	2,65,228
	86	Hagari (near Hagari)	4th Oct. 1877	34	64·00	2,396·00	68·25	16·30	660·90	6,42,732
21 (*c*)— Guntakal-Mysore Frontier.	87	Penner (near Khadarpett)	1st June 1892	11	150·00	1,740·00	21·00 to 55·00	18·71	1,077·00	2,89,774

DIX 36—*concluded.*

in Report for 1902.)

Appendix 36.
Cost of bridges.

***over, and costing not less than Rs. 6,00,000 each up to the 31st December 1903*—concld.**

graph 31 of Report.)

Total cost of girders.	Cost of protective works.	Total cost including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No. of bridges.	Remarks.
Rs.	Rs.	Rs.	Rs.	Rs.		
23,96,558	(*a*) 20,06,246	71,01,689	1,210	105	53	Has a combined road and railway on the same level. (*a*) Including Rs. 1,98,055, cost of materials for temporary bridge.
8,02,104	2,73,226	19,48,811	(*b*) 579	(*b*) 66	54	Has a combined road and railway on the same level and a footway on each side, supported on wrought iron brackets, and provided with hand rails. (*b*) Calculated on cost, which includes Rs. 18,000 on account of cost of staging.
24,96,074	4,946	27,89,340	3,094	185	55	
3,77,912	...	5,57,880	899	110		Has a roadway on the same level as the rails, and a footway on each side, the roadway being formed of steel corrugated troughs fitted with teak scantlings.
10,83,528	6,66,120	28,34,101	594	56	56	Has a roadway on the same level as the rails, 15′ wide between girders and 14′ 6″ headway at centre from rail-level to bottom of cross girders of top boom. The roadway consists of corrugated steel troughs fitted with deodar battens.
16,06,334	...	23,00,025	1,181	(*c*) 107	57	(*c*) Including staging erection, painting and share of service works; contingencies, plant and general charges.
3,32,098	3,547	9,27,182	767	65	58	(*d*) Pier No. 2 . . . . . 10′ below low-water. ,, ,, 3 . . . . . 48′ ,, ,,
3,24,622	3,526	7,54,678	507	109	59	,, ,, 4 . . . . . 48′ ,, ,, ,, ,, 5 . . . . . 53′ ,, ,, ,, ,, 6 . . . . . 20′ ,, ,,
1,99,040	9,25,508	15,75,177	285	63	60	,, ,, 1, 7 and 8 . . . . above low-water.
3,10,388	1,32,724	8,22,103	227	28	61	
8,75,745	1,74,160	17,60,978	557	(*e*)	62	Has the rails above and the roadway below. (*e*) Included in the cost of girders.
10,86,000	6,92,146	27,94,564	728	62	63	
3,99,277	2,20,091	10,22,550	458	10	64	
32,55,035	1,45,929	47,04,771	929	47	65	Has a roadway on the same level as the rails, and a footway on each side, supported on cantilevers outside the girders.
6,88,391	1,21,837	11,36,495	477	42	66	Has a roadway on the same level as the rails.
7,78,519	5,67,542	18,67,196	604	51	67	The permanent-way is laid on cross sleepers laid on trough foot plates, which are filled in with rammed kunkur and are used as a military road for guns, etc.
4,88,442	21,361	9,21,705	658	133	68	(*f*) South abutment 34·08. North abutment 35·00′. Pier 1; 72·33′, Pier 2; 82·00′. Land spans above T. W. level 27·54′.
(*l*) 1,41,090	...	6,17,465	552	(*m*) 116·33	69	(*k*) This amount includes cost of ballast, plates, teakwood work, temporary bridge, diversion and contingencies, &c. (*l*) This amount represents, cost of girders, repairing carriage to site and petty iron work. (*m*) Includes painting.
(*g*) 3,29,522	6,34,665	(*h*) 14,58,143	570	65	70	(*g*) Including cost of erection of girders, Rs. 74,543. (*h*) Including Rs. 28,971, on account of protective works, Rapti bridge, incurred during 1894-95.
11,09,548	6,30,776	24,20,546	484	47	71	Has military blockhouses at either end and a roadway at rail-level which is being adapted o artillery.
10,95,259	(*i*)	20,72,495	529·84	31	72	(*i*) No special protection works, Rs. 3,046 cost of a guide bund and Rs. 2,635 cost of a spur and Rs. 1,05,944 cost of block kunker protection round piers and abutments are included in the cost of work to girder-level.
7,29,506	48,244	(*j*) 13,84,888	614	61	73	Has a foot-way on each side, supported on wrought-iron brackets and provided with a hand rail. (*j*) Excluding cost of viaduct, Rs. 1,40,505.
7,35,165	23,24,335	45,04,628	687 24	62·21	74	
14,64,997	...	16,98,210	751	...	75	Height 320′.
4,20,941	6,87,826	15,05,824	386	53	76	
3,81,544	3,75,818	11,69,548	490	53	77	
3,30,861	3,51,012	10,71,952	494	67	78	
2,43,131	1,27,980	7,11,296	366	...	79	Cost of erection not known.
6,90,683	48,776	(*n*) 18,33,877	736	85	80	Lattice girders carrying the rails below and the carriage road above. This bridge is built for and carries the standard gauge. (*n*) Including some special items not separately detailed.
4,42,205	777	(*p*) 18,73,925	660	106	81	Triangulated girders designed to carry the rails above and a carriage road below. (*o*) Including two abutment spans. (*p*) Including some special items not separately detailed.
3,72,000	14,194	(*q*) 8,49,000	728	35	82	Has a combined road and a railway on the same level (*q*) Including some special items not separately detailed.
4,71,097	26,419	8,30,772	343	73	83	
7,48,444	47,852	11,39,641	322	84	84	
4,79,402	5,474	7,50,104	318	...	85	
1,21,173	...	7,63,905	319	...	86	
3,10,941	1,49,430	7,50,145	345	40	87	

Appendix 37.
Cost of tunnels.

(Appendix 49

Cost and particulars of tunnels of 500 feet length and over and costing not less

(Referred to in para

Railway and Gauge.	Serial No. of tunnels.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Length.					Total cost including tools and plant.
					Unlined.	½ lined.	½ lined.	Completely lined.	Total.	
(5′ 6″ gauge.)					Feet.	Feet.	Feet.	Feet.	Feet.	Rs.
2 (a)—Bengal-Nagpur.	1	Darekasa	Darekasa	Single	735	...	...	...	735	1,82,984
	2	Saranda	Goilkera	Single	388	...	1,253	...	1,641	8,66,964
	3	Bhortonk	Khodri (Katni branch)	Single	...	...	...	1,000	1,000	2,09,674
3 (a)—East Indian.	4	Monghyr (*a*)	Below Jamalpur	Built for double line, but 2′ too narrow.	434	...	...	466	900	No record
3 (b)—Godavari-Rutlam-Nagda.	5	Panchpipla	Bajranggath	Single	540	...	...	225	765	(*b*) 2,29,829
6 (a)—Great Indian Peninsula.	6	Thull Ghât No. 2	Kasara	Double	...	...	1,625	...	1,625	3,90,894
	7	Thull Ghât No. 7	Igatpuri	Double	1,461	...	...	...	1,461	1,77,255
	8	Thull Ghât No. 8	Igatpuri	Double	1,247	...	...	...	1,247	1,52,325
	9	Bagra	Bagra	Double	...	...	910	...	910	2,15,747
	10	Bhore Ghât No. 13	Thakurvadi	Double	1,305	...	...	...	1,305	1,73,649
	11	Bhore Ghât No. 23	Reversing station	Double	405	...	363	...	768	2,09,783
	12	Bhore Ghât No. 24	Reversing station	Double	975	...	48	...	1,023	1,50,352
9 (a)—North Western State. Main line.	13	Sohawa No. 1	Sohawa	Single	...	...	538½	...	538½	(*c*) 1,67,629
	14	Margalla No. 3	Sarai Kala	Single	...	450	500	...	950	(*c*) 1,87,150
	15	Attock No. 4	Khairabad	Single	...	...	677½	...	677½	(*c*) 1,80,924
	16	Attock No. 5	Khairabad	Single	...	...	722	...	722	(*c*) 1,63,003
Sind-Pishin section.	17	Gundakinduff	Midway between Babar Kachh and Kochali.	Single	...	...	569½	...	569½	2,08,826
	18	Kochali, Lower	Kochali	Single	...	...	506	...	506	1,84,061
	19	Karez No. 2 Karez	Dirgi	Single	2,034	...	...	...	2,034	4,41,963
	20	Lower Chapper Arching	Mangi	Single	...	...	592	...	592	1,62,657
	21	Iron Gates	Mangi	Single	1,227	...	...	...	1,227	3,12,679
	22	Mudgorge Arching	Mudgorge	Single	...	...	1,087	...	1,087	4,12,341
(Chaman extension.)	23	Khojak No. 18	Shelabagh	Double	...	...	12,870	...	12,870	(*d*) 68,26,790
	24	No. 20	3½ miles below Shelabagh.	Double	...	...	756	...	756	2,24,027
	25	No. 23	6½ miles below Shelabagh.	Double	...	...	800	...	800	2,57,291

DIX 37.

Appendix 37.
Cost of tunnels.

in Report for 1902.)

than Rs. 1,50,000 each on the railways in India up to the 31st December 1903.

graph 31 of Report.)

Cost per foot run.	Time taken to drive heading.	Time taken to complete tunnel: From	Time taken to complete tunnel: To	Serial No. of tunnels.	Remarks giving nature of ground passed through, etc.
Rs.					
249	Not known	May 1879	6th Nov. 1893	1	All hard rock.
528	1·75 years	January 1888	Sept. 1892	2	Very hard slaty rock with a great deal of water.
210	1·00 year	14th March 1888	6th Dec. 1890	3	Gneiss interspersed with veins of quartz. The total cost excludes the cost o plant.
...	Not known	March 1856	June 1861	4	Quartz and slate.
		(Work suspended	during one year).		(a) A foot-path has been laid and fenced off through the tunnel.
300	0·63 year	24th August 1892	7th April 1894	5	Northern 500 feet hard basalt; southern 265 feet hard rock, but composed of boulders liable to fall. This part has been lined. (b) Including Rs. 17,000 for machinery.
240	4·75 years	February 1858	March 1864	6	Loose rock.
121	4·08 years	March 1859	May 1864	7	Rock.
122	5·08 years	July 1859	August 1864	8	
237	...	About 6	years	9	Hard rock with fissures.
133	5·08 years	October 1856	December 1862	10	Trap rock.
273	4·00 years	August 1856	February 1862	11	
147	3·75 years	January 1857	March 1861	12	
(c) 311	0·50 year	November 1878	15th March 1880	13	Red clay and sandstone. War prices were paid owing to the Afghan war. Common coolies were paid 8 annas per day. The heading was got through in six months, and the work was then left quite in abeyance, pending further orders, till September 1879; otherwise the whole would have been complete within a year.
(c) 197	0·54 year	4th April 1881	15th Aug. 1882	14	Nummulitic limestone shaken with clay seams.
(c) 267	...	Not recorded		15	Treacherous shale.
(c) 226	...	Not recorded		16	Treacherous shale. (c) The charges do not include tools and establishment, for which an addition of, say, 15 to 20 per cent. should be made to the figures given. Cost of faces is included. Probably charges for timber, etc., have not been exactly distributed; a safe rate for a completely lined tunnel would apparently be about Rs. 230 per foot.
367	...	1884	1886	17	Sandstone in hard and soft beds.
364	...	1884	1886	18	Soft sandstone with beds of soft earth
217	...	...	...	19	Hard limestone.
275	...	...	...	20	Gravel with red clay.
255	...	...	...	21	Hard limestone.
379	...	...	...	22	Middle eocene gypsiferous deposits. This was originally intended to be an open cutting, but owing to the constant slips, etc., it was eventually covered in.
530	2·01 years	13th April 1889	September 1891	23	Lining practically completed on the 31st October 1894. Water bearing shales and layers of soft mud. The tunnel has been three-quarters lined throughout. (d) The cost of tunnel is Rs. 66,00,518, that of lining, Rs. 2,25,601, and that of capital establishment, Rs. 671.
296	0·34 year	December 1888	June 1890	24	Hard and soft shales with beds of mud. This is a cut and cover on 902 ft. radius.
322	0·44 year	April 1889	November 1890	25	Through soft and hard water bearing shales on 819 ft. radius.

Appendix 37.

Cost of tunnels.

APPEN

(Appendix 49

Cost and particulars of tunnels of 500 feet length and over and costing not less than

(Referred to in para

Railway and Gauge.	Serial No. of tunnels.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Length. Unlined.	¼ lined.	½ lined.	Completely lined.	Total.	Total cost, including tools and plant.
					Feet.	Feet.	Feet	Feet.	Feet.	Rs.
(5′ 6″ gauge—*concld.*) 9 (*a*) North Western State—*concld.*										
(*Mushkaf-Bolan section.*)	26	No. 2	Mushkaf	Double	...	...	650	...	650	1,70,662
	27	No. 7	Ocepur	Double	...	528	211	...	739	2,16,787
	28	Panir No. 9	Panir	Double	...	523	2,695	...	3,218	12,81,710
	29	Seetal No. 12	Peshi	Double	...	...	1,035	...	1,035	2,96,510
	30	Cascade No. 14	Dozan	Double	...	189	353	...	542	1,66,870
(*Mari-Attock section.*)	31	No. 1	Jhalar	Single	101	...	...	1,076	1,180	2,49,142
	32	,, 2		Single	...	...	...	854	854	1,81,423
	33	,, 3		Single	104	...	...	1,671	1,775	3,41,143
	34	,, 4		Single	288	...	...	842	1,130	2,01,614
	35	,, 5		Single	...	...	...	1,614	1,614	2,91,054
	36	,, 6		Single	...	...	...	1,897	1,897	3,65,807
	37	,, 9	Chhab	Single	...	...	...	1,300	1,300	2,60,793
(3′ 3½″ gauge.)										
11 (*a*)—Assam-Bengal.	38	No. 1 (Division 8, Section II).	Between Bihara and Damchara.	Single	...	...	...	671	671	3,61,414
	39	No. 2 (Division 9, Section II).	Between Harangajao and Jatinga.	Single	...	...	...	596	596	2,83,623
	40	No. 5 (Division 9, Section II).		Single	...	...	...	824	824	4,23,529
	41	No. 7 (Division 9, Section II)		Single	...	...	...	845	845	4,20,664
	42	No. 10 (Division 9, Section II).	Between Haflong and Mahur.	Single	...	Flying arch. 295	31	200	526	2,53,756
	43	Mahur No. 1 (Division 10, Section II).	Between Mahur and Maibang.	Single	...	...	...	1,923	1,923	13,00,000
	44	No. 2 (Division 10, Section II).		Single	...	...	...	518	518	3,16,192
	45	No. 4 (Division 10, Section II).		Single	...	...	...	860	860	5,34,775
	46	Dyakho No. 2 (Division 11, Section II).	Between Maibang and Langting.	Single	...	...	...	744	744	2,77,533
21 (*a*)—Southern Maharatta.	47	Castle Rock	Castle Rock	Double	...	...	...	1,242	1,242	9,08,615
	48	No. 2	Alandi	Single	630	...	...	...	630	1,53,963
	49	Nandicanama	Chelama	Single	...	...	...	1,527	1,527	4,41,418
21 (*b*)—West of India Portuguese.	50	No. 1	About 3½ miles below Dudh Sagar.	Double	422½	...	81½	...	504	1,75,629
	51	No. 5	Dudh Sagar	Double	561	39	65	...	665	1,81,872
	52	No. 10	About 2½ miles above Dudh Sagar.	Double	772	70	...	...	842	1,54,512
(2′ 6″ gauge.)										
28—Kalka-Simla.	53	Koti No. 1	Koti	Single	...	...	...	2,280	2,280	3,99,657
	54	Barog	Barog	Single	...	...	...	3,752	3,752	8,17,930
	55	Taradevi No. 1	Taradevi	Single	...	...	...	1,598	1,598	2,61,217
	56	Inverarm	Simla	Single	...	...	...	1,125	1,125	1,82,987

DIX 37—*concluded.*

In Report for 1902.)

***Rs. 1,50,000) each on the railways in India up to the 31st December 1903*—concld.**

graph 31 of Report.)

Cost per foot run.	Time taken to drive heading.	Time taken to complete tunnel. From	Time taken to complete tunnel. To	Serial No. of tunnels.	Remarks giving nature of ground passed through, etc.
Rs					
263	0·25 year	October 1893	June 1895	26	Through clay and sandstone bands on the straight.
293	0·25 year	November 1893	March 1895	27	Through conglomerate: 354 feet on 4° curve and the rest straight.
398	0·81 year	November 1892	May 1895	28	Through nummulitic limestone of varying degrees of hardness on the straight.
286	0·63 year	March 1893	September 1895	29	Through clay and conglomerate bands: 1,000 feet straight and the rest on 3° curve.
308	0·37 year	August 1892	November 1894	30	Through hard limestone on the straight.
211	2 years	1891	1897	31	Lime and sandstone; also shale.
212	2 years	1891	1896	32	
192	2 years	1891	1897	33	
178	2 years	1891	1896	34	
180	2 years	1891	1897	35	
193	2 years	1891	1897	36	
201	2 years	1896	1898	37	Sandstone and red clay and shale.
539	0·67 year	1st January 1895	December 1898	38	Through hard sand interspersed with shale with occasional seams of clayey ground and laterite. The tunnel is timbered on the English system with 4 to 6 drawing bars.
476	Average 4′ per day.	March 1894	June 1901	39	Blue shale and very wet in places.
514	Average 4′ per day.	May 1897	October 1901	40	Blue shale except a short length through old river bed with boulders.
498	Average 4′ per day.	March 1896	March 1903	41	In blue shale about ¼ inner wet and heavy ground.
482	Average 4′ per day.	August 1897	March 1903	42	Through shaly sandstone.
676	Average 4′ per day.	March 1897	September 1903	43	Through dash shale with kaolinite beds.
610	Average 4′ per day.	March 1900	July 1903	44	Through dash shale with kaolinite beds.
622	Average 4′ per day.	January 1898	November 1903	45	Shale and broken sandstone.
373	Average 4′ per day.	September 1897	September 1901	46	Sandstone and hard sand.
732	About 8 years	April 1883	October 1889	47	Loam.
244	About 2 years	1884	1886	48	Black trap rock.
289	About 2½ years	1884	1890	49	Limestone rock.
348	1·33 years	March 1884	November 1886	50	
274	1·17 years	May 1885	April 1887	51	Black trap and granite gneiss.
184	1·41 years	January 1885	April 1887	52	Hard granite rock.
175	1½ years	8th May 1900	October 1903	53	Red clay and shale.
Not yet completed.	2¼ years	15th July 1900	Not yet complete	54	Fissured sandstone.
163	1½ years	3rd May 1901	September 1903	55	Micaceous schist.
163	¾ year	15th February 1902.	September 1903	56	Chloritic shale and stone.

Appendix 38.
Index.

APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1903.

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Note.—For particulars relating to railways under survey or projected, see the "Histories of Railway Projects corrected up to the 30th June" each year, which is issued as a separate publication by the Government of India.

APPENDIX 38.

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 1}}{\text{Sub-head (a)}}$. **BENGAL CENTRAL RAILWAY** (5 6″ gauge)—

The line was worked for the Bengal Central Railway Company by the Eastern Bengal Guaranteed Railway Company from the 16th October 1882 to the 30th June 1884 and by the Eastern Bengal State Railway Administration until the 1st January 1897, on which latter date the Company took over the working.

	Open line.	Under construction.
	Miles.	Miles.
Mileage	125·01	*Nil.*

Running powers—

	Miles.
Home line over Foreign line :—	
Dum Dum Junction to Canal Junction, Eastern Bengal State railway	1·61
Canal Junction to Calcutta " " " "	2·96
Canal Junction to Chitpore " " " "	2·00
Calcutta to Kidderpore Docks " " " "	7·31
	13·88

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Dum-Dum Junction to Dattapukur	Mar. 1881	2-4-83	14·25		1882	20
Dattapukur to Gobardanga		7-12-83	17·00		1883	52
Gobardanga to Bongong		22-4-84	12·00			
Bongong to Khoolna		16-2-84	61·26		1884 to 1903	125
Total main line	...	...	...	104·51		
Branch—						
Ranaghat to Bongong	Mar. 1881	16-10-82	20·50			
Total branch	...	...	...	20·50		
GRAND TOTAL	...	...	...	125·01		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 62 lbs to the yard, laid on creosoted pine sleepers. Sal sleepers are now being used for renewals and have already been put in at the rail-joints on all curves and in some cases also at the middle of each pair of rails.

Ballast.—The main line between Dum Dum Junction and Khoolna is brick ballasted; the branch line from Ranaghat to Bongong is sand ballasted, brick ballast being used only at bridges, level-crossings, curves and in a few short lengths where the soil is bad

Fencing.—The line is fenced throughout. Iron gates are provided at level-crossings.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—26th July 1881.—Bengal Central Railway Company's principal contract with the Secretary of State.
5th January 1887.—Contract with the Secretary of State for the construction and working of the Bengal Central railway and for future extensions.

The general conditions of the contracts are as follows :—

Government aid.—Government guarantee interest at 3½ per cent. in sterling on the Company's share capital. Land was provided free of charge.

Currency of contracts.—The contracts may remain in force until the 31st December 1980. Government may, however, determine them on the 30th June 1905 or any succeeding 10th year on twelve months' notice, or on six months' notice at any time if the Company fail to observe their obligations, or the line is worked at a loss. On the determination of the contract by efflux of time or by notice, the Government are to pay the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net earnings, after providing for repayment to Government of interest (if any) on moneys that may be raised by debentures in excess of the original capital of £1,000,000, are divided in proportion of three-fourths to the Secretary of State and one-fourth to the Company; the proportion due to the Secretary of State being applied towards meeting the guaranteed interest.

Rates and fares.—Certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of Railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 1}}{\text{Sub-head (a)}}$. **BENGAL CENTRAL RAILWAY** (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	TABLE I.							TABLE II.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1881	10,51,983	...	...	...	51,616	...	—51,616	...	...
1882	46,38,355	...	...	...	1,85,534	...	—1,85,534	...	...
1883	79,36,235	1,07,954	—39,390	...	3,17,449	...	—3,56,839	64	136·50
1884	90,54,719	4,54,837	—1,19,682	...	3,62,189	...	—4,81,871	76	126·31
1885	90,04,061	5,35,353	8,233	0·09	3,60,162	...	—3,51,929	82	98·46
1886	89,65,705	5,67,343	—42,528	...	3,75,210	...	—4,17,738	87	102·70
1887	91,09,422	6,48,494	—7,928	...	4,60,840	...	—4,68,768	100	101·22
1888	92,59,170	7,12,901	1,58,145	1·71	5,19,942	...	—3,61,797	110	77·82
1889	94,46,671	7,37,191	2,95,938	3·13	5,18,693	...	—2,22,705	113	59·85
1890	96,88,212	6,67,804	2,45,907	2·54	4,39,962	58,992	—2,53,047	103	63·18
1891	99,44,845	8,11,666	3,27,736	3·30	4,72,482	73,429	—2,18,175	125	59·62
1892	1,00,65,784	7,69,347	3,12,903	3·11	5,30,251	74,600	—2,91,948	118	59·33
1893	1,00,83,983	7,83,529	3,14,992	3·12	5,37,007	79,647	—3,01,662	121	59·80
1894	1,01,41,094	8,20,179	2,41,182	2·37	6,11,415	...	—3,70,233	126	60·92
1895	1,01,77,466	9,47,391	3,98,809	3·92	6,08,944	85,023	—2,95,158	146	57·90
1896	1,06,38,927	9,33,266	3,44,465	3·20	5,69,175	91,306	—3,16,016	144	62·85
1897	1,17,36,810	11,38,199	5,16,922	4·40	5,36,809	95,271	—1,15,158	175	56·98
1898	1,23,58,300	10,24,657	3,68,008	2·98	5,19,231	1,20,642	—2,71,865	158	64·08
1899	1,26,78,629	11,39,689	4,41,813	3·48	5,07,035	97,581	—1,62,803	158	61·23
1900	1,26,96,415	13,33,419	5,50,699	4·34	5,04,985	1,24,611	—78,897	185	58·70
1901	1,29,54,075	14,05,248	6,42,940	4·96	5,08,291	1,46,144	—11,495	194	54·25
1902	1,31,13,415	13,17,214	5,73,918	4·38	5,11,298	1,53,667	—91,047	182	56·43
1903	1,31,88,948	15,08,506	5,07,425	3·85	5,15,051	1,21,830	—1,29,456	209	66·36

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (e)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM—**

Lines comprising system.—The Bengal-Nagpur railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(a)	Bengal-Nagpur railway (5′ 6″ gauge)	1,370·53	43·32	1,413·85
	East Coast State railway, Northern section* (5′ 6″ gauge)	311·93	...	311·93
(b)	Jubbulpore-Gondia extension, Bengal-Nagpur railway (2′ 6″ gauge)	76·95	178·17	255·12
(c)	Parlakimedi Light railway (2′ 6″ gauge)	24·62	...	24·62
(d)	Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)	56·24	...	56·24
(e)	*Mohurbhanj* (2′ 6″ gauge)	...	32·10	32·10
	Total	1,840·27	253·59	2,093·86

Running powers—

	Miles.
Home line over Foreign lines:—	
At Katni, East Indian railway	0·30
At Asansol ,, ,, ,,	0·50
At Howrah ,, ,, ,,	1·00
At Nagpur, Great Indian Peninsula railway	0·65
Waltair to Vizagapatam including wharf and swamp lines, Southern section, East Coast State railway	4·97
Total	7·42
Foreign line over Home line:—	
Great Indian Peninsula railway at Katni	1·60

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge.)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
BENGAL-NAGPUR PROPER—			Miles.	Miles.		Miles.
Main line—						
Asansol to Damoodur		12-6-89	5·10			
Damoodur to Purulia		14-12-89	41·72		Bengal-Nagpur proper.	
Purulia to Chakardharpore		22-1-90	72·25			
Chakardharpore to Goilkera		15-5-90	21·06			
Goilkera to Jharsuguda	12-9-84	1-2-91	105·09		1880	53
Jharsuguda to Raigarh		20-4-90	44·35			
Raigarh to Bilaspur		10-2-90	81·90		1881	98
Bilaspur to Raipur		10-1-89	68·35			
Raipur to Rajnandgaon		4-12-88	41·99		1882	149
Rajnandgaon to Nagpur	1878 and '81†	1880, '81 & '82†	144·88			
					1883	149
Branches— Total main line	...	...	...	626·69		
Sanctoria coal branch—					1884	149
Damoodur to the Sanctoria collieries	12-9-84	12-6-89	7·03			
					1885	149
Chaurashi branch	17-7-01	1-2-03	8·16			
Carried over	...	...	15·19	626·69		

* Transferred for working as an integral part of the Bengal-Nagpur railway from the 1st January 1901.

† These are the dates of sanction and opening of the original metre gauge line, which was converted to the 5′ 6″ gauge and re-opened on that gauge on the 27th November 1888.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 2 / Sub-heads (*a*) to (*e*) **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Branches—concld. Brought forward	...	...	15·19	626·69		
Sambalpur branch—					Bengal-Nagpur proper.	
Jharsuguda to Sambalpur	July 1891	1-2-93	30·23			
Katni branch—						
Bilaspur to Birsinghpur	12-9-84	1-2-91	142·60		1886	186
Birsinghpur to Umaria		11-5-90	18·48		1887	186
Umaria to Katai	Septr. 1884	2-11-86	35·88			
Katni-Murwara junction line	...	...	1·98		1888	225
			198·94		1889	348
Calcutta extension—						
Sini to Khargpur		1-6-98	99·00		1890	584
Khargpur to Khal Bridge		17-12-98	34·30			
Khal Bridge to Rajapur Khal		24-5-00	18·80		1891	831
Rajapur Khal to Howrah		14-12-00	17·00			
			169·10		1892	831
Santragachi to Shalimar		15-3-01	2·13		1893	862
Hooghly foreshore to Kidderpore Docks	August 1895	10-4-01	0·60		1894	861
			2·73		1895	862
Cuttack extension—						
Kharpur to Balasore		17-12-98	71·25		1896	861
Balasore to Barang (Cuttack)		10-1-99	116·75			
			188·00		1897	861
Midnapore extension—						
Khargpur to Cossye river	January 1899	20-12-99	4·75		1898	1,067
Right bank of the Cossye river to Midnapore		8-6-01	3·00		1899	1,190
			7·75		1900	1,226
Midnapore-Jherriah extension—						
Midnapore to Bhojudih	1-6-01	1-2-03	114·50		1901	1,234
Bhojudih to Bhaga	9-12-01	20-4-03	6·66			
Bhaga to Malkera		1-9-03	8·79		1902	1,234
Bhowra branch	1-11-01	14-5-03	1·95			
			131·90		1903	1,370
Total branches	...	...	...	743·84		
TOTAL OPEN MILEAGE, BENGAL-NAGPUR PROPER	...	...	...	1,370·53		
EAST COAST STATE RAILWAY, NORTHERN SECTION—						
Main line—					East Coast State railway, Northern section.	
Cuttack Road (Barang) to Bhubaneshwar		1-2-97	10·32			
Bhubaneshwar to Khurda Road		20-7-96	11·76			
Khurda Road to Rambha		1-8-96	61·54			
Rambha to Berhampur-Ganjam	July 1890	1-9-95	29·56		1893	*
Berhampur-Ganjam to Palasa		1-4-95	45·76		1894	
Palasa to Parlakimedi Road (Naupada)		17-12-94	33·11		1895	
Parlakimedi Road (Naupada) to Vizianagram		20-7-94	55·20			
Vizianagram to Waltair		15-7-93	37·50		1896	
					1897	
Total main line	...	...	...	284·75	1898	
Puri branch—					1899	
Khurda Road to Puri	July 1895	1-2-97	25·34		1900	
Temporary Puri station to new Puri station		1-6-98	1·84			
					1901	319
Total branch	...	...	...	27·18	1902	312
					1903	312
TOTAL EAST COAST STATE RAILWAY, NORTHERN SECTION	...	...	...	311·93		
TOTAL OPEN MILEAGE, BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE	...	...	...	1,682·46		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE.						
Bauria to Fort Gloster	25-6-00	12-2-04	2·00			
Bhojudih to Hariharpur	11-1-01	...	26·96			
Malkera to Mohuda		...	3·40			
Aldih branch	20-12-02	...	2·47			
Colliery lines—						
Bhojudih to Parthadihi	1-11-01	...	2·28			
Southern half of the Malkera-Katrasgarh cross connection		...	6·71			
Jamadhoba branch—						
Jamadhoba to Balliary	24-6-03	...	5·50			
Total lines under construction	...	...	...	43·32		
GRAND TOTAL, BENGAL-NAGPUR, 5′ 6″ GAUGE	...	...	...	1,725·78		
DOUBLE LINE—						
BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE—						
Howrah to Santragachi	...	14-12-00	3·42			
Santragachi to Bauria	...	17-6-02	10·80			
Shalimar branch	...	...	2·13			
Total double line	...	...	16·35			

* Included with the Madras railway, North-East line (the southern section of the East Coast State railway).

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (e)}}$ **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The Sini-Calcutta-Cuttack section is laid with 85 lb. steel rails on cast iron pot sleepers. The Cuttack-Waltair section is laid with 75 lb. flat-footed steel rails with 5-holed fish-plates on wooden and steel pea-pod sleepers. On the main line the rails are 75 lb. steel, flat-footed, 30 feet long, laid on 10 transverse steel sleepers and two wooden sleepers per rail, except between Nagpur and Kamptee, where 12 steel sleepers per rail are used. On the Bilaspur-Umaria section, 75 lb. flat-footed steel rails are laid on 10 transverse steel sleepers and 2 sal sleepers at the joints, except between Khongsara and Khodri, where steel sleepers 10 to the rail, are used. The Sambalpur branch is laid with the same type of permanent-way as on the main line, but no sal sleepers have been added at rail joints. The Umaria-Katni section was originally laid with second-hand East Indian railway permanent-way on timber sleepers (82 lb. rails on three-fourths of the distance and 74 lb. rails on the remainder), but is now relaid with 75 lb. flat-footed rails on transverse steel sleepers.

Ballast.—The line is ballasted throughout with good stone, except for a few miles on the Chakardharpur district, where laterite is used.

Tunnels.—See Appendix 37.

Bridges.—See Appendix 36.

Fencing.—The line is unfenced except between Nagpur and Kamptee and at the more important stations, and at some of the station yards and first class level crossings on the Barang-Waltair section. The question of fencing the main line is under consideration.

Curves.—On the main line there are no curves sharper than 1,000 feet radius. On the Sanctoria Coal branch, there is only one curve with a radius of less than 1,000 feet, the length of which is 0·28 mile and radius 800 feet.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri, 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

Terms of contracts—

The Bengal-Nagpur railway is worked under the following contracts—

Contracts of—9th March 1887, Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpur Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2′ 6″ gauge) feeder line with a branch to Rajim; an extension (5′ 6″ gauge) from Sini *vid* Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jherriah coal-fields; a line (2′ 6″ gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Seoni and Seoni to Chindwara; and for the working of the Northern section of the East Coast State railway as part of the undertaking.

The general conditions of the contracts are as follows :—

Government aid.—Government guarantee interest in sterling at 4 per cent. per annum on £3,000,000 share capital; on any further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon.

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being either provided by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

Currency of contracts :—

(1) *Principal contract.*—Government may determine the contract, by giving twelve months' previous notice, on the 31st December 1913, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations, or the line be worked at a loss. On the termination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid in by the Company.

(2) *Sambalpur branch contract.*—The contract for this branch brings it within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895, on giving twelve months' notice.

(3) *Contract of 23rd January 1902 : Northern section, East Coast State railway.*—Government may at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances and without compensation in respect of such retransfer.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure up to Rs. 1,000 and not exceeding Rs. 2,000 at the discretion of the Consulting Engineer, classed as a "Minor Work," subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (e)}}$ **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast State railway, bear to the gross earnings of the latter section.

Rates and fares.—Certain maxima and minima have been fixed within which the Company are permitted to vary rates. The Madras Railway Company have the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company have similarly power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working—See page 174.

2 (*b*) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Nainpur to Gondia	23-1-01	18-4-03	76·95		1903	77
Total open mileage	...	...	...	76·95		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Main line—						
Jubbulpore to Nainpur	23-1-01	†1-11-04	68·01			
Branches—						
Nainpur to Mandla	23-1-01	...	*22·67			
Nainpur to Seoni		12-2-04	47·26			
Seoni to Chindwara		†1-11-04	40·23			
Total lines under construction	...	...	...	178·17		
GRAND TOTAL	...	...	...	255·12		

Details of construction—

The greater part of this railway is still under construction.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracte relating to that railway.

Statistics of working—See page 174.

2 (*d*) Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Main line—				
Raipur to Kurud	3-5-97	10-9-00	31·50	
Kurud to Dhamtari		17-12-00	14·24	
Total main line	...	...	...	45·74
Branch—				
Abhanpur to Rajim	...	15-10-00	10·50	10·50
GRAND TOTAL	...	...	...	56·24

Details of construction—

Permanent-way.—The line is laid with 31 lb. flat-footed steel rails on sal sleepers.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—There are five curves of less than 1,000 feet radius aggregating 12 miles in length.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—See page 174.

* Work not yet commenced.
† Probable date of opening.

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 2 / Sub-heads (*a*) to (*e*) **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

Statistics of working—

TABLE I.

(BENGAL-NAGPUR RAILWAY INCLUDING THE NORTHERN SECTION OF THE EAST COAST STATE RAILWAY; RAIPUR-DHAMTARI BRANCH AND THE JUBBULPORE-GONDIA EXTENSION.)

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	28,62,990	...	...		83,911	...	—83,911
1880	55,49,511	1,03,952	28,215	0·51	1,58,804	...	—1,30,589
1881	78,65,710	2,81,529	66,056	0·90	2,62,932	...	—1,96,876
1882	90,64,388	6,04,386	1,89,171	2·09	3,39,967	...	—1,50,796
1883	96,43,590	13,20,021	6,83,860	7·09	3,73,283	...	+3,10,577
1884	1,06,34,112	13,23,014	6,58,080	6·19	4,24,400	...	+2,33,680
1885	1,50,66,406	14,14,889	4,93,575	3·28	5,86,281	...	—92,706
1886	1,81,70,455	14,24,521	5,33,514	2·94	7,29,554	...	—1,96,041
1887	2,42,30,987	14,47,705	3,03,207	1·25	13,35,563	...	—10,32,356
1888	5,25,92,291	16,09,195	5,62,971	1·07	22,17,383	...	—16,54,362
1889	7,08,75,456	19,96,930	4,03,160	0·57	29,96,364	...	—25,93,204
1890	8,14,66,762	28,64,578	5,47,463	0·67	33,88,852	...	—28,41,389
1891	9,08,04,164	54,57,356	26,84,453	2·96	35,05,676	...	—8,21,223
1892	9,56,14,736	60,83,562	30,08,166	3·15	39,05,345	...	—8,97,179
1893	9,80,08,424	64,17,751	32,62,220	3·33	43,97,594	...	—11,35,374
1894	9,81,73,789	66,90,648	32,58,414	3·32	45,83,993	...	—13,25,579
1895	9,88,94,777	68,74,740	35,41,444	3·58	48,56,800	...	—13,15,356
1896	11,05,30,319	68,68,525	29,27,869	2·65	48,27,504	...	—18,99,635
1897	13,04,58,784	62,00,809	29,79,559	2·28	51,35,240	...	—21,55,681
1898	14,67,03,520	68,79,193	33,63,854	2·29	54,23,186	...	—20,59,332
1899	16,65,90,365	90,73,460	47,21,814	2·83	59,75,853	...	—12,54,039
1900	17,41,74,604	1,29,75,223	77,18,050	4·43	64,90,637	...	+12,22,413
1901	21,19,23,276	1,30,77,769	61,48,648	2·90	79,88,163	1,78,810	—20,18,325
1902	22,51,91,979	1,42,18,227	69,79,346	3·10	85,44,311	41,604	—16,06,569
1903	24,97,58,940	1,55,47,702	70,45,255	2·82	89,66,131	4,067	—19,24,943

TABLE II.

Calendar year.	Nagpur-Chattisgarh, 3′ 3⅜″.		Katni-Umaria, 5′ 6″.		(*a*) Bengal-Nagpur, 5′ 6″.		(*b*) Raipur-Dhamtari branch and Jubbulpore-Gondia extension, 2′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings	Earnings per mile per week.	Pro: of exp: to earnings	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.	
1879	...	...	...	...	...	...	...	...
1880	51	79·54	...	...	...	...	...	...
1881	87	76·33	...	...	...	...	...	...
1882	114	68·70	...	...	...	...	...	...
1883	170	48·19	...	...	...	...	...	...
1884	171	57·82	...	...	...	...	...	...
1885	183	65·12	...	...	...	...	...	...
1886	184	62·51	37	104·35	...	...	...	...
1887	177	59·09	41	116·41	...	...	...	...
1888	...	...	...	...	164	67·58	...	...
1889	...	...	...	...	131	80·98	...	...
1890	...	...	...	...	101	80·89	...	...
1891	...	...	...	...	129	50·81	...	...
1892	...	...	...	...	141	50·55	...	...
1893	...	...	...	...	144	49·17	...	...
1894	...	...	...	...	149	51·30	...	...
1895	...	...	...	...	153	48·49	...	...
1896	...	...	...	...	142	54·03	...	...
1897	...	...	...	...	138	51·94	...	...
1898	...	...	...	...	143	51·10	...	...
1899	...	...	...	...	152	47·96	...	...
1900	...	...	...	...	207	40·56	...	...
1901	...	...	...	...	161	52·88	25	72·13
1902	...	...	...	...	176	51·09	21	77·27
1903	...	...	...	...	178	54·63	21	61·98

2 (*c*) Parlakimedi Light railway (2′ 6″ gauge)—

On the 20th May 1901, the Indian railways Act, IX of 1890, except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Naupada to Parlakimedi	14-3-98	1-4-00	24·62	24·62

Details of construction—

Permanent-way.—The line is laid with 30 lb. flat-footed steel rails and transverse wooden sleepers.
Ballast.—The line is ballasted throughout.
Fencing.—The line is fenced where it runs along the public road.
Curves.—There are no curves of less than 1,000 feet radius.
Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Parlakimedi Light railway is worked under an agreement, dated the 14th April 1902, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Rajah of Parlakimedi.
Currency of agreement.—The agreement is current to end of 1903 subject to renewal.
Terms of working.—Actual cost.
Rates and fares.—To be fixed by the Company.

Statistics of working—

Calendar year.	TABLE I. Capital outlay.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	...	...	...	...	...	...
1902	...	...	...	...	...	...
1903	7,10,974	16,633	—9,265	...	13	155·70

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (e)}}$ **BENGAL-NAGPUR RAILWAY SYSTEM—*concld.***

2 (*e*) Moharbhanj railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Baripada to Baripada Road station	18-7-02.	*1-1-05	32·10	32·10

The line is under construction by the Moharbhanj State. The question of working agency has not yet been finally settled.

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—**

Lines comprising system—The Bombay, Baroda and Central India railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Bombay, Baroda and Central India railway	(5′ 6″ gauge)	465·12	504·35	504·35
	(3′ 3⅜″ gauge)	39·23		
(*b*) Godhra, Ratlam-Nagda railway	(5′ 6″ gauge)	141·14	...	141·14
(*c*) Nagda-Ujjain railway	(5′ 6″ gauge)	34·32	...	34·32
(*d*) Petlad-Cambay railway (Anand-Tarapur section)	(5′ 6″ gauge)	21·50	...	21·50
(*e*) Petlad-Cambay railway (Tarapur-Cambay section)	(5′ 6″ gauge)	10·92	...	10·92
(*f*) Tapti Valley railway	(5′ 6″ gauge)	155·48	...	155·48
(*g*) Ahmedabad-Dholka railway	(3′ 3⅜″ *gauge*)	33·50	...	33·50
(*h*) Ahmedabad-Parantij railway	(3′ 3⅜″ gauge)	54·70	...	54·70
(*i*) Geakwar's Mehsana railway	(3′ 3⅜″ gauge)	92·63	...	92·63
(*j*) Palanpur-Deesa railway	(3′ 3⅜″ gauge)	17·28	...	17·28
(*k*) Rajputana-Malwa railway	(3′ 3⅜″ gauge)	1,649·30	133·32	1,782·62
(*l*) Vijapur-Kalol-Kadi railway	(3′ 3⅜″ gauge)	41·37	...	41·37
(*m*) Gaekwar's Dabhoi railway	(2′ 6″ gauge)	88·00	6·49	94·49
(*n*) Rajpipla railway	(2′ 6″ gauge)	37·37	...	37·37
(*o*) *Jaipur (Siwai-Madhopur) railway*	(3′ 3⅜″ *gauge*)	...	72·35	72·35
	Total	2,881·86	212·66	3,094·52

Running powers—

	Miles.
Home line over Foreign line :—	
Dadar Junction to Carnac bridge, Great Indian Peninsula railway	4·39
Foreign lines over Home line :—	
East Indian railway, Agra East Bank to Agra Fort	1·00
Great Indian Peninsula railway at Ujjain	0·24
" " " Dadar Junction to Colaba	7·25
" " " at Agra	2·89
	11·38

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement: Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Colaba to Marine lines	May 1856	18-1-70	2·00		1860	36
Marine lines to Charni Road	1868	19-6-69	0·75			
Charni Road to Bellasis Road	Charni Road to Grant Road, May 1863; Grant Road to Dadar, July 1862; Dadar to 50¼ mile (from Colaba), 1859; 50th mile (from Colaba) to Surat, 1858.	13-9-68	0·75		1861	134
					1862	167
Bellasis Road to Bulsar		28-11-64	121·00		1863	185
					1864	305
Bulsar to Navsari		2-9-61	24·25		1865	306
					1866	306
Navsari to Sachin		20-5-61	9·25		1867	306
					1868	307
Sachin to Surat		18-3-61	9·00		1869	307
Surat to Amroli		19-11-60	2·25			
Amroli to Anklesvar		10-2-60	28·75		1870	312
Anklesvar to the Nerbudda		5-12-60	5·50			
Nerbudda to Broach	1857	22-6-60	48·75		1871	350
Broach to Baroda	and	9-1-61	11·25			
Baroda to Dholia	1859	22-4-61	33·25		1872	389
Dholia to Mohmadabad		3-9-62	17·89			
Mohmadabad to Ahmedabad		21-1-63	3·75		1873	†412
Ahmedabad to Sabarmati		1-1-70	13·75			
Sabarmati to Sanand	October	24-5-71	22·98		1874	428
Sanand to Viramgam (3′ 3⅜″ *gauge.*)	1870	30-11-71	39·23			
Viramgam to Wadhwan	†24-10-70	‡25-5-72				
Total main line, carried over	...	...	...	389·35		

* Probable date of opening.
† Includes the Patri branch.
‡ These are the dates for the original 5′ 6″ gauge line. The dates for the 3′ 3⅜″ gauge line are 21st April and 14th December 1902.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 3 / Sub-heads (*a*) to (*o*) **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Brought forward—Total main line	...	...	...	389·35		
Branches—					1875	430
Godhra branch—					1876	439
Anand to Dakor	5-11-73	8-4-74	16·75		1877	444
Dakor to Rukhyal	...	6-1-75	1·75		1878	444
Rukhyal to Hungari	...	6-12-76	9·00		1879	444
Hungari to Pali	...	29-1-77	4·71			
Pali to Godhra	...	26-2-82	17·00		1880	444
					1881	444
			49·21		1882	461
Patri branch—					1883	461
Kharagboda to Viramgam	13-6-71	12-5-73	22·12		1884	461
Godhra-Baroda chord—					1885	461
Baroda to Godhra	6-6-02	23-12-03	43·67		1886	461
					1887	461
Total branches	...	...	...	115·00	1888	461
TOTAL OPEN MILEAGE BOMBAY, BARODA AND CENTRAL INDIA PROPER	...	...	...	504·35	1889	461
					1890	461
					1891	461
DOUBLE LINE—					1892	461
Colaba to Marine lines	...	18-1-70	1·91		1893	461
Marine lines to Charni Road	...	19-6-69	0·71		1894	461
Charni Road to Bellasis Road	...	13-9-68	1·29			
Bellasis Road to Mahim	...	20-7-65	5·44		1895	461
Mahim to Bandra	...	23-2-66	1·07		1896	461
Bandra to Santa Cruz	...	23-5-66	1·83		1897	461
Santa Cruz to Andheri	...	29-8-67	2·71		1898	461
Andheri to Bhayndar	...	27-4-85	13·38		1899	461
Bhayndar to Virar	...	1-10-85	10·34			
Virar to Palghar	...	1-12-97	19·28		1900	461
Palghar to Dahanu Road	...	17-1-98	20·37		1901	461
Dahanu Road to Gholvad	...	20-4-00	6·68		1902	461
Gholvad to Daman Road	...	18-10-00	23·19		1903	504
Daman Road to Bulsar	...	29-4-02	16·44			
Bulsar to Sachin	...	21-4-02	32·90			
Sachin to Kankra Khari	...	4-7-87	6·36			
Kankra Khari to Surat	...	5-6-68	2·72			
Surat to Amroli	...	9-10-67	2·19			
Amroli to Sayan	...	25-5-98	6·48			
Sayan to Kim	...	1-10-98	6·38			
Kim to Anklesvar	...	11-12-99	16·16			
Broach to Miyagam	...	15-10-99	25·42			
Miyagam to Itola	...	15-9-97	7·82			
Itola to Baroda	...	7-6-95	10·77			
Berjadi to Ahmedabad	...	2-6-87	10·21			
TOTAL DOUBLE LINE	...	...	251·90*			

Details of construction—

Permanent-way.—The main line is laid chiefly with 69 lb. double-headed steel rails. On the double line from Colaba to Mahim, Virar to Dahanu, Amroli to Anklesvar and Chamargam to Miyagam, 82l b. bull-headed steel rails are laid on creosoted pine sleepers with four-holed chairs. On the double line from Dahanu to Sachin, Broach to Chamargam and Miyagam to Itola 82 lb. bull-headed steel rails are laid on cast-iron pot sleepers. On the double line from Mahim to Virar, 69 lb. double-headed steel rails are laid on creosoted pine sleepers. On the double line from Sachin to Amroli 69 lb. double-headed steel rails are laid on creosoted pine and cast-iron pot sleepers mixed. On the double line from Itola to Baroda, 69 lb. double-headed steel rails are laid on cast-iron pot sleepers. On the Patri branch 48 lb. and 50 lb. flat-footed rails are laid on creosoted pine sleepers. On the Godhra branch 61 lb. and 69 lb. double-headed steel rails are laid with a few trifling exceptions, on cast-iron pot sleepers. The Viramgam-Wadhwan section was originally laid with 60 lb. iron rails on cast-iron pot sleepers; on the conversion of the line to metre gauge these were replaced by 41½ lb. steel rails on deodar sleepers. On the Godhra-Baroda Chord, for the first 7 miles 82 lb. bull-headed steel rails are laid on cast-iron bowl sleepers; for the remainder 75 lb. flat-footed rails are laid on cast-iron bowl sleepers.

Ballast.—The main line, Bombay to Ahmedabad, the Godhra branch, and the Godhra-Baroda Chord, are ballasted with broken stone, shingle, and gravel ballast. The line between Ahmedabad and Wadhwan, with the exception of two short lengths ballasted with gravel, is ballasted with sand having a 3″ covering of stone ballast. The Patri branch is ballasted with sand.

Tunnels.—See appendix 37.

Bridges.—See appendix 36.

Fencing.—The main line is fenced from Bombay to Ahmedabad with wire fencing; from Ahmedabad to Wadhwan with cactus for 27½ miles and wire fencing for 52½ miles. The Godhra branch is fenced with cactus for 2½ miles and with wire fencing for 46¾ miles. The Godhra-Baroda Chord is fenced with the Government type of iron post and wire fencing. The Patri branch is unfenced.

Curves.— There are no curves with a radius of less than 1,500 feet.

Gradients.—On the main line the ruling gradient is 1 in 500: on the Godhra branch 1 in 200: on the Patri branch 1 in 306 and on the Godhra-Baroda Chord 1 in 300, except for a length of 2,200 feet where the gradient is 1 in 200.

* Excluding 4·17 miles from Anklesvar to Nerbudda Block station constructed but not opened for traffic.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″gauge)—*contd.*

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad.

2nd February 1859—for the construction and working of a line from Bombay to Surat.

17th November 1871—for the construction and working of a line from Viramgam to Wadhwan.

1st February 1901—as to share of working expenses debitable to branch lines worked.

The general conditions of the contracts are as follows :—

Government aid.—Guarantee of interest in sterling at 5 per cent. for the term of the contract. On some portion of the share capital and on debentures lower rates of interest are also guaranteed.

Currency of contracts.—The contracts are current for a period of 99 years from 1855, after which the line becomes the property of Government on payment of the actual capital outlay in sterling. The Government may, however, determine the contracts by purchase after the expiration of 25 or 50 years of the term, namely in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contracts at any time, on giving three months' notice, if the Company fail to observe obligations. In such case, Government repay the capital expended.

NOTE.—The Government relinquished their right to determine the contracts at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1905 (within six months of the 1st of May).

Power of Company to surrender contract.—The Company may surrender, on six months' notice, at any time receiving back the capital expended.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work, subject to a maximum charge on such account of Rs. 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company ; the interest payments being calculated for the purpose of this division at 1*s.* 10*d.* to the rupee.

Rates and fares.—Under the contract, Government fixed maxima rates and fares which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot also be altered by the Company without Government sanction. Authority has, however, been given to the Company, by an executive order, to vary their rates within the prescribed maxima without reference to Government.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Guaranteed Interest.*	Company's share of net traffic receipts.†	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	8,54,16,162	71,52,788	32,13,354	3·76	43,69,254	...	—11,55,900
1880	8,47,31,626	82,44,376	47,34,654	5·58	43,69,254	5,83,346	—8,02,293
1881	8,66,45,443	97,45,193	56,78,755	6·55	43,69,254	8,30,298	+4,78,703
1882	8,75,89,091	1,01,76,190	50,15,610	5·73	43,07,784	3,05,346	—98,461
1883	8,89,91,377	1,19,22,209	67,16,067	7·54	43,33,189	11,44,329	+12,33,949
1884	9,02,69,608	1,21,95,580	68,27,562	7·63	49,99,341	13,17,763	+5,70,453
1885	9,22,58,636	1,31,40,336	74,01,987	8·02	52,35,189	14,57,541	+7,89,257
1886	9,16,82,602	1,35,05,635	78,73,228	8·50	55,87,440	16,97,985	+5,37,603
1887	9,32,12,200	1,21,64,856	69,98,127	7·50	57,17,318	12,56,055	+24,754
1888	9,45,87,848	1,27,38,933	70,48,164	7·45	60,29,893	12,68,879	—2,50,608
1889	9,49,45,797	1,32,34,371	75,41,031	7·94	61,10,257	14,86,390	—55,566
1890	9,53,16,045	1,29,40,370	74,23,195	7·79	54,66,227	14,22,120	+5,34,848
1891	9,55,86,799	1,41,37,769	82,25,120	8·60	58,61,996	18,06,348	+5,36,776
1892	9,55,28,735	1,42,44,478	81,30,959	8·51	65,57,945	17,86,755	—2,13,741
1893	9,62,57,862	1,50,96,045	95,78,044	9·95	66,44,227	25,02,537	+3,24,280
1894	9,77,45,855	1,59,48,484	1,00,70,974	10·30	76,09,071	27,35,713	—2,73,816
1895	9,97,90,965	1,75,53,067	1,09,37,063	10·96	77,03,258	31,37,619	+96,186
1896	10,31,57,107	1,62,03,033	89,00,862	8·63	73,03,613	20,18,128	—4,36,879
1897	10,63,10,220	1,42,61,293	64,70,202	6·09	69,36,853	951,545	—15,18,196
1898	10,85,60,144	1,58,62,726	87,42,205	8·05	67,87,071	19,49,477	+5,657
1899	11,40,73,858	1,74,65,045	92,90,365	8·15	67,46,668	21,68,922	+3,74,775
1900	11,60,94,044	1,75,98,486	82,28,632	7·08	68,35,449	15,68,577	—1,75,394
1901	11,95,61,022	1,59,38,796	87,53,789	7·32	70,04,569	18,11,890	—62,670
1902	12,18,78,965	1,57,43,536	79,37,622	6·51	71,28,187	12,93,644	—4,84,309
1903	12,37,93,839	1,69,63,928	84,95,201	6·87	72,59,871	15,12,518	—2,77,188

* Converted at current rates of exchange.
† Arrived at under terms of contract.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM**—*contd.*

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.			Rs.			Rs.	
1860	49	70·17	1871	300	59·98	1882	427	50·76	1893	630	36·55
1861	73	54·97	1872	290	59·97	1883	497	43·10	1894	665	36·85
1862	94	50·14	1873	260	59 23	1884	509	42·95	1895	732	37·69
1863	138	49·51	1874	565	52·12	1885	548	43·11	1896	676	45·07
1864	156	85·33	1875	285	54·41	1886	564	41·12	1897	595	54·63
1865	223	63·83	1876	296	54·74	1887	508	41·89	1898	662	44·89
1866	278	71·93	1877	345	41·97	1888	532	44·11	1899	729	46·81
1867	291	66·56	1878	298	46·61	1889	552	42·44	1900	734	52·50
1868	287	73·66	1879	309	46·97	1890	540	42·06	1901	665	44·06
1869	307	74·32	1880	355	42·57	1891	590	41·23	1902	659	49·00
1870	327	60·54	1881	423	41·04	1892	594	42·92	1903	753	49·46

3 (*b*) Godhra-Rutlam-Nagda railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Godhra to Limkhera	29-10-90	16-1-93	25·09		1893	25
Limkhera to Dohad		7-3-94	19·55		1894	115
Dohad to Rutlam		22-10-94	70·46		1895	115
Rutlam to Nagda	Dec. 1894	11-5-96	26·04		1896 to 1903	141
TOTAL	...	...	...	141·14		

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed, steel rails, laid on transverse steel, deodar and creosoted pine sleepers.

Ballast.—The line is ballasted throughout with broken stone and gravel.

Fencing.—The line is fenced with wire from mile 0 to mile 35 and in various other sections, making an aggregate of 76½ miles. The rest of the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—5th October 1893 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Godhra-Rutlam railway.

1st October 1897 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Rutlam-Nagda railway.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are the same as on the Rajputana-Malwa railway.

Statistics of working.—Included with the Rajputana-Malwa railway.

3 (*c*) Nagda-Ujjain railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Nagda to Ujjain	17-12-94	15-7-96	34·32	34·32

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*c*) Nagda-Ujjain railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails, with 5 bolt-hole fish-plates, laid on cast-iron oval pot sleepers, Indian Midland railway pattern.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line has not been fenced, except round station yards.

Curves.—There are no curves with a radius of less than 1,910 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The railway is worked under the following :—

Agreement of—15th July 1896 (between His Highness the Maharaja of Scindia and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :—

Government aid.—Nil. The line is the property of the Scindia State.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement.— } party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares.—Conform generally with those in force on the Godhra-Rutlam-Nagda railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	5,33,560	...	...	...	...	...
1896	20,71,251	40,701	17,762	0·86	49	56·36
1897	22,19,919	1,04,639	47,756	2·15	58	54·36
1898	22,31,596	1,29,627	71,509	3·29	78	44·83
1899	22,34,346	1,47,175	77,732	3·48	83	47·18
1900	22,29,753	2,51,788	1,20,956	5·42	141	51·96
1901	22,31,982	1,12,366	67,208	3·01	63	40·19
1902	22,39,663	1,57,211	85,851	3·83	88	45·39
1903	22,41,230	1,20,951	62,949	2·81	63	47·95

3 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Anand to Petlad	Dec. 1888	5-5-90	13·17		1890 to 1900	13
Petlad to Tarapur	4-7-99	20-6-01	8·33			
TOTAL	...	...	...	21·50	1901 to 1903	21

Details of construction—

Permanent-way.—The permanent-way from Anand to Petlad consists of 66½ lb. flat-footed steel rails on steel sleepers, and from Petlad to Tarapur on creosoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—The whole of the Anand-Petlad section is fenced with cactus.

Curves.—There are no curves with a radius of less than 1,433 feet.

Gradients.—The ruling gradient is 1 in 200.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—*concld.*

Terms of contracts—

The railway is worked under the following :—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :—

Government aid.—*Nil.* The line is the property of the Baroda State.

Currency of agreement.—The agreement is current for a period of three years.

Power to determine agreement.—Either party may terminate the agreement at any time on giving one year's notice.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.				TABLE II.			
				Gaekwar's Petlad, 5′ 6″.		Petlad-Cambay (Anand-Tarapur section), 5′ 6″.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percent on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	
1888	11,030	...	...	...	...	...	...	...
1889	4,71,822	...	...	...	...	...	...	...
1890	6,47,922	32,649	20,870	3·22	71	36·08	...	...
1891	7,10,118	59,113	36,346	5·12	85	38·51	...	...
1892	7,11,031	61,243	34,757	4·89	88	43·25	...	...
1893	7,12,768	63,953	40,627	5·70	92	36·47	...	...
1894	7,23,482	69,668	44,037	6·09	100	36·79	...	...
1895	7,23,139	73,891	46,584	6·44	106	36·96	...	...
1896	7,23,616	1,17,540	82,847	11·45	169	29·52	...	...
1897	7,55,769	64,737	33,946	4·49	93	47·56	...	...
1898	7,49,047	51,121	28,156	3·76	74	44·92	...	...
1899	7,52,499	70,668	39,312	5·22	102	44·37	...	...
1900	7,52,697	88,481	41,713	5·55	127	52·86	...	...
1901	11,86,381	93,233	51,769	4·36	...	...	101	44·47
1902	11,85,980	1,05,951	56,818	4·79	...	...	95	46·37
1903	11,48,092	98,451	50,289	4·38	...	...	88	48·92

3. (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Tarapur to Cambay	4-7-99	20-6-01	10·92	10·92

Details of construction—

Permanent-way.—The permanent-way consists of 66½ lb. flat-footed steel rails laid on creosoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—The line has not been fenced, except round station yards.

Curves.—There are no curves with a radius of less than 1,910 feet.

Gradients.—The ruling gradient is 1 in 200.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (e)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—*concld.*

Terms of contracts—

The railway is worked under—

Agreement of—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:—

Government aid.—*Nil.* The line is the property of the Cambay State.

Currency of agreement.—
Power to determine agreement.— } The agreement may be terminated at any time on one year's notice from either party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay State and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	7,49,676	12,011	5,950	0·79	40	50·46
1902	7,49,676	25,497	13,622	1·81	45	46·57
1903	7,49,676	25,151	12,808	1·71	44	49·10

3. (*f*) Tapti Valley railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Kankra Khari to Vyara	...	1-12-98	35·59			
Vyara to Chinchpada	....	10-7-99	36·55		1898	36
Chinchpada to Nandarbar	...	8-10-99	25·20		1899	139
Nandarbar to Dondaiche	....	11-11-99	21·44		1900 to 1903	155
Dondaiche to Nardana	...	25-11-99	19·78			
Nardana to Amalner	...	15-3-00	18·92			
Total	...	...	...	155·48		

Details of construction—

Permanent-way.—The permanent-way consists of 70 lb. flat-footed steel rails laid on creosoted pine and teak sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is not fenced, except round station yards.

Curves.—There are no curves with a radius of less than 1,910 feet.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory has also been provided free.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*f*) Tapti Valley railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent.§ of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	8,390	...	...	...	...	...	...	...	...
1897	20,96,294	...	...	...	...	...	...	...	...
1898	6,04,45,413	2,836	*	...	...	*	...	18	48·70
1899	1,21,09,183	2,42,593	*	...	...	*	...	71	47·40
1900	1,28,31,291	6,68,475	†	...	...	†	...	84	44·00
1901	1,29,18,730	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90	74	43·01
1902	1,29,70,581	8,26,485	4,64,242	3·57	45,196	5,08,438	3·92	102	43·95
1903	1,30,02,400	8,62,753	4,83,142	3·72	40,258	5,23,400	‖ 4·03	107	44·00

3. (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sabarmati to Bavla	2-10-01	23-2-03	24·75	...
Bavla to Dholka		1-4-03	8·75	...
TOTAL	...	...	...	33·50

Details of construction—

Permanent-way.—The permanent-way consists of 47½ lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows :—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

* Credited to interest on capital.

† The net earnings for the first-half of 1900 were credited to interest on capital, and those for the second-half of 1900 (including rebate) were treated as a set-off against the charge to capital for interest in the accounts for the first-half of 1901.

§ Under terms of the contract of 1st February 1901.

‖ Excluding interest, Rs. 4,483, on the capital cost of works at Amalner junction, the percentage was 4·00.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings, but not exceeding 4½ per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Rebate from Bombay, Baroda and Central India railway.	Total income.	Per cent of total income on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	10,13,420	64,261	35,986	3·55	...	35,986	3·55	45	44·00

3. (*h*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ahmedabad to Talod	January 1896.	1-5-97	32·82	
Talod to Parantij		2-7-97	7·83	
Parantij to Idar-Ahmednagar		23-10-97	14·05	
TOTAL .	...	...	...	54·70

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails laid on transverse deodar and creosoted pine sleepers.

Ballast.—The line is ballasted throughout with stone, kunkur or sand.

Fencing.—The line is unfenced except round station yards.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Ahmedabad-Parantij railway is worked under the following contracts:—

Contracts of—18th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings but not exceeding 4½ per cent.* of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

* Under terms of the contract of the 1st February 1901.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 3}{\text{Sub-heads } (a) \text{ to } (o)}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*h*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	13,12,752	...	...	...	...	...	...	...	...
1897	19,42,211	69,069	36,665	1·89	...	36,665	1·89	46	46·92
1898	19,42,971	1,49,790	85,836	4·42	...	85,836	4·42	33	42·70
1899	19,49,616	2,10,634	1,12,687	5·24	...	1,12,687	6·24	74	42·23
1900	19,55,305	2,65,105	1,55,952	7·93	...	1,55,952	7·98	93	41·17
1901	19,49,355	1,77,438	99,365	5·10	...	99,365	5·10	62	44·00
1902	19,70,012	1,78,794	1,00,685	5·11	...	1,00,685	5·11	63	40·04
1903	18,88,869	1,50,112	84,063	4·23	...	84,063	4·23	53	44·00

3 (*i*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mehsana to Vadnagar	...	21-3-87	20·73		1887	21
Vadnagar to Kheralu	...	12-12-88	7·00		1888	28
Viramgam to Mehsana	...	1-2-91	40·21		1889	28
Mehsana to Patan	...	20-7-91	24·69		1890	28
					1891 to 1903	93
Total	...	...	...	92·63		

Details of construction—

Permanent-way.—The length from Mehsana to Kheralu is laid with 41½ lb. flat-footed steel rails on transverse steel trough sleepers. The remainder of the line is laid with 40 lb. iron and 41½ lb. steel rails, on deodar sleepers, except a mile on the Mehsana-Viramgam section, on which the rails are laid on steel trough sleepers.

Ballast.—The line is ballasted throughout with stone, kankur or sand.

Fencing.—The whole line, except 41½ miles which are fenced by wire, was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts, and what remains is much broken up.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following:—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1887	13,55,492	27,890	5,564	0·41	33	80·05
1888	9,16,565	47,502	16,672	1·82	43	64·90
1889	11,18,446	55,290	20,348	1·82	37	61·82
1890	25,44,340	59,241	23,308	0·92	41	60·66
1891	29,04,050	1,94,247	1,05,801	3·64	49	45·53
1892	29,71,610	2,58,968	1,53,005	5·15	54	40·92
1893	30,26,752	3,36,859	1,98,250	6·55	70	41·12
1894	30,94,578	3,79,972	2,36,387	7·64	79	37·79
1895	32,55,044	3,38,444	2,02,440	6·22	70	40·18
1896	32,61,448	4,23,283	2,71,262	8·32	88	35·91
1897	32,63,900	3,39,125	1,18,358	3·63	70	46·58
1898	32,82,612	3,46,491	1,99,052	6·07	72	42·55
1899	32,83,612	3,76,160	2,16,654	6·60	79	42·40
1900	33,01,950	4,28,545	2,36,754	7·17	89	44·75
1901	33,48,911	3,92,227	2,15,111	6·44	81	45·16
1902	33,63,329	3,74,515	1,98,977	5·92	78	46·87
1903	33,78,182	3,47,083	1,77,466	5·25	72	48·87

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 3}{\text{Sub-heads } (a) \text{ to } (o)}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*j*) Palanpur-Deesa railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Palanpur to Deesa	20-3-92	8-11-93	17·28	17·28

Details of construction—

Permanent-way.—The permanent-way consists of 40 lb. iron rails laid on Denham-Olpherts' plate, cast-iron, pot, and on steel dish cover sleepers.

Ballast.—The line is ballasted throughout with stone, kunkur or sand.

Fencing.—The entire length, with the exception of a little wire fencing at mile 2, is fenced with cactus.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under—

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated 23rd June 1892, from the Secretary of State to the Government of India.

Contract of.—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—The line is owned jointly by Government and by the Palanpur Durbar.

Currency of contract.—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the extra expenditure incurred in providing a 5′ 6″ gauge sub-structure.

Rates and fares.—Same as on the Rajputana-Malwa railway.

Statistics of working—

Calendar year.	Table I. Palanpur-Deesa (Native State section). Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Palanpur-Deesa (British section). Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Prop. of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1892	20,000	...	...	...	46,746	...	...	...	1,031	—1,031	...	...
1893	1,85,000	2,255	1,335	0·72	1,78,953	2,181	1,110	0·63	5,371	—4,261	33	44·87
1894	1,85,000	17,381	11,365	6·14	2,14,601	20,168	11,781	5·49	6,783	+2,998	42	33·35
1895	1,85,000	17,643	11,333	6·13	2,15,374	20,539	11,512	5·35	6,378	+3,134	42	40·17
1896	1,85,000	22,861	14,101	7·62	2,32,746	28,765	15,972	6·47	9,149	+5,923	57	43·50
1897	1,85,000	19,133	10,883	5·88	2,33,264	24,181	12,243	5·25	9,305	+2,938	48	46·55
1898	1,85,000	16,393	10,334	5·59	2,33,264	21,306	11,628	4·99	9,331	+2,297	43	42·50
1899	1,85,000	19,739	12,112	6·54	2,33,264	24,389	13,618	5·84	9,330	+4,288	50	42·37
1900	1,85,000	21,084	14,238	7·70	2,33,264	26,585	12,616	5·41	9,330	+3,826	53	43·66
1901	1,85,000	16,279	8,375	5·97	2,33,264	20,426	10,548	4·52	9,330	+1,218	41	45·87
1902	1,85,000	14,777	8,329	4·50	2,36,786	18,913	8,330	3·52	9,408	—1,078	37	47·01
1903	1,85,000	13,033	7,423	4·01	2,37,069	16,701	7,398	3·33	9,432	—1,534	33	48·47

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—

The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum, for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (e)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway; but Government reserve the right to take back the line at any time.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
RAJPUTANA SECTION—			Miles.	Miles.		Miles.
Main line—						
Delhi to Rewari	1-3-70	14-2-73	51·25			
Rewari to Alwar	14-8-72	15-9-74	46·25		1873	92
Alwar to Bandikui		7-12-74	37·75		1874	329
Bandikui to Dausa		20-1-74	17·75		1875	465
Dausa to Jaipur	20-10-71	12-10-74	38·00		1876	535
Jaipur to Phulera		1-8-75	34·25			
Phulera to Ajmer	9-4 73	1-1-75	49·75		1877	535
Ajmer to Beawar		15-5-78	32·25		1878	632
Beawar to Haripur		12-8-79	21·00		1879	753
Haripur to Sojat Road	4-9-76	20-10-80	20·50		1880	911
Sojat Road to Palanpur		1-1 81	148·00			
Palanpur to Ahmedabad		15-11-79	83·00		1881	1,256
					1882	1,251
Total main line, Rajputana section	...	...	579·75		1883	1,346
					1884	1,603
Branches on Rajputana section—						
					1885	1,667
Farukhnagar Salt branch	1-3-70	14-2-73	7·75		1886	1,668
					1887	1,668
Agra branch—					1888	1,665
Bandikui to Bharatpur		24-4-74	60·50			
Bharatpur to Agra Fort	20-10-71	11-8-73	34·14		1889	1,672
Agra Fort to Jumna East bank		1-1-76	1·50		1890	1,672
			96·14		1891	1,674
					1892	1,674
Sambhar Lake Salt branch	9-4-73	1-8-75	4·50		1893	1,674
Jayog extension	14-7-75	Oct. 76	4·50		1894	1,674
Extension of Sambhar branch to Jhowra	15-5-78	20-12-79	17·00		1895	1,674
Kankaroola siding	....	15-2-81	1·25		1896	1,674
Additional salt sidings in the Sambhar lake	...	1-9-91	5·02			
					1897	1,674
(5′ 6″ gauge.)					1898	1,674
					1899	1,669
Jumna East bank to Agra Cantonment	....	1-1-76	3·07*		1900	1,678
Lahori Gate Cabin to Brewery Cabin at Delhi	...	...	0·94			
					1901	1,648
Total branches	...	...	140·17		1902	1,648
					1903	1,649
TOTAL RAJPUTANA SECTION	...	...	...	719·92		
MALWA SECTION—						
Main line—						
Khandwa to Sanawad	8-1-72	1-2-74	34·25			
Sanawad to Mortakka		1-4 74	3·50			
Mortakka to Choral		20-1-75	20·50			
Choral to Mhow		1-1-78	15·69			
Mhow to Indore		8-8-76	13·00			
Indore to Fatehabad	29-10-73	3-8-76	25·23			
Fatehabad Junction to Rutlam		11-7-78	48·75			
Rutlam to Jaora	5-10-77	25-2-80	20·50			
Jaora to Mandsaur		8-4-80	30·75			
Mandsaur to Neemuch		2-7-80	30·25			
Neemuch to Nimbahera	30-4-79	10-3 81	16·40			
Nimbahera to Chitorgarh		19 3 81	17·65			
Chitorgarh to Nasirabad		1-12-81	100 65			
Nasirabad to Ajmere	14-4-74	14-2-76	14·15			
Total main line, Malwa section	...	...	392·27			
Branch on Malwa section—						
Ujjain branch—						
Fatehabad to Ujjain	29-10-73	3-8-76	12·00			
Ujjain branch extension across the Sipra river to Ujjain city	6-12-82	1-3-84	2·88†			
Total Branch	...	...	14·88			
TOTAL MALWA SECTION	...	...	...	407·15		
Carried ove	...	...	...	1,127·07		

* Of this, the length on the Jumna bridge is of mixed (5′ 6″ and 3′ 3⅜″) gauges.

† Includes 2·10 miles, 5′ 6″ gauge, from Sipra Junction to station opened in 1899.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3.}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles
Brought forward	...	...	...	1,127·07
CAWNPORE-ACHNERA SECTION—				
Main line—				
Cawnpore to Kanauj	13-10-78	15-12-80	49·51	
Kanauj to Farukhabad		1-2-81	36·50	
Farukhabad to Kasganj	13-7-82	14-4-84	67·00	
Kasganj to Hathras		1-7-84	34·00	
Hathras to Muttra	April 1874	19-10-75	29·00	
Jumna bridge	July 1882	1-7-84	1·00	
Muttra to Achnera	Feb. 1880	7-11-81	22·33	
Total main line, Cawnpore-Achnera section	...	...	239·34	
Branches on Cawnpore-Achnera section—				
Brahmavart branch	13-3-84	10-11-85	5·00	
Soron branch	16-3-83	4-1-85	9·60	
Brindaban branch	4-5-88	26-8-89	7·32	
Total branches	...	...	21·32	
TOTAL CAWNPORE-ACHNERA SECTION	...	...	...	260·66
REWARI-BHATINDA-FAZILKA SECTION—				
Main line—				
Rewari to Hissar	13-9 81	20-8 83	89·00	
Hissar to Sirsa	8-10-82	1-4-84	50·50	
Sirsa to Kot Kapura.		1-10-84	*72·07	
Kot Kapura to Fazilka		1-1-85	50·00	
TOTAL REWARI-BHATINDA-FAZILKA SECTION	...	...	...	261·57
TOTAL OPEN MILEAGE, RAJPUTANA-MALWA RAILWAY	...	...	...	1,649·30
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Rewari to Phulera	20-12-01	†1-1-06	133·32	
Total lines under construction	...	...	...	133·32
GRAND TOTAL, RAJPUTANA-MALWA RAILWAY PROPER	...	...	...	1,782·62
DOUBLE LINE, RAJPUTANA SECTION—				
Agra Fort to Agra Cantonment	...	31-8-73	1·14	
Second track at Delhi	...	25-12-82	1·78	
Total double line	...	...	2·92	

Details of construction—

Permanent-way.—The permanent-way consisted originally of 36 lb. and 40 lb. flat-footed iron rails laid on transverse deodar and creosoted pine sleepers. The 36 lb. iron rails have all been replaced by 41¼ lb. flat-footed steel rails, which have again been replaced by 50 lb. steel flat-footed rails on the main line except in some station yards. The creosoted half-round pine sleepers with which the road was first laid have been replaced by deodar sleepers. On the line from Cawnpore to Raya 41¼ lb. flat-footed steel rails are laid on deodar sleepers and from Raya to Achnera 50 lb. flat-footed steel rails on deodar sleepers. On the Rewari-Bhatinda-Fazilka line 41¼ lb. flat-footed steel rails are laid on deodar and Denham-Olpherts' plate sleepers. On the Malwa section, from Ajmer to Rutlam, the rails are mixed 41¼ lb. steel and 40 lb. iron; from Rutlam to Mortakka the rails are 50 lb. steel except in station yards; and from Mortakka to Khandwa the rails are mixed 41¼ lb. steel and 40 lb. iron.

Ballast.—The line is ballasted throughout with stone, kunkur or sand.

Fencing.—The total length of line fenced on the Rajputana section is 660 miles, or about three-fourths of the whole section. The Malwa section is fenced for 93½ miles including the ghats between Mhow and Kalakund and at stations. The Cawnpore-Achnera section is fenced on both sides for 145½ miles on the main line, except for 7½ miles which are fenced on one side only. The Soron branch is fenced for 8½ miles and the Brindaban branch for 8½ miles. The Rewari-Bhatinda-Fazilka section is fenced for about 113¼ miles and at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150, except on the Malwa section, between Khandwa and Kalakund where it is 1 in 100 and between Kalakund and Patalpani where it is 1 in 40.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—24th September 1884 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

16th March 1888.—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway.

* Of this 26·28 miles, between Kot Kapura and Bhatinda, are of mixed (5′ 6″ and 3′ 3⅜″) gauges.
† Probable date of opening.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (e)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*b*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

Terms of contracts—*contd.*

8th November 1889.—Contract supplemental to that of 1884 for maintaining and working the Brindaban branch.

1st February 1901.—Contract modifying that of 1884.

The general conditions of the contracts are as follows :—

Government aid.—The line is the property of the State.

Currency of contracts.—The duration of the contracts is up to the 31st December 1905.

Power of company to surrender contracts.—Nil.

Terms of working.—The working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2′ and 2′ 6″ gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3′ 3⅜″ gauge, and Godhra-Ratlam-Nagda, 5′ 6″ gauge, railways, are paid in full to Government.

Rates and fares.—Maximum and minimum rates and fares have been fixed within which the Company are authorised to vary the rates.

Statistics of working—

TABLE I.*

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	7,06,47,354	33,64,997	15,41,903	2·18	28,43,439	...	−13,01,536
1880	8,38,87,014	59,12,511	17,33,714	2·07	35,81,449	...	−18,47,735
1881	9,30,43,645	94,70,410	35,93,044	3·86	37,43,505	...	−1,52,461
1882	9,94,83,933	1,14,82,614	52,84,668	5·31	38,74,919	...	+14,09,749
1883	11,08,57,933	1,35,64,166	63,39,208	5·72	40,74,808	...	+22,64,400
1884	11,92,08,595	1,46,20,446	64,92,677	5·19	42,90,548	...	+18,02,129
1885	12,22,64,117	1,73,00,501	79,71,964	6·52	49,10,379	...	+30,61,585
1886	12,80,59,407	1,82,98,610	89,55,549	6·99	51,72,731	6,28,054	+31,54,764
1887	12,87,69,487	1,65,28,208	81,24,547	6·31	51,86,578	5,06,190	+24,31,779
1888	12,96,59,656	1,86,14,714	96,31,727	7·43	52,27,945	4,99,908	+39,04,474
1889	13,02,33,556	1,99,30,905	91,32,788	7·01	52,48,893	8,56,110	+30,27,785
1890	13,00,01,510	1,74,28,281	86,42,525	6·65	52,61,288	6,57,951	+27,23,236
1891	13,17,20,440	2,17,69,570	1,23,17,065	9·35	53,13,844	8,78,835	+61,24,386
1892	14,34,24,072	2,24,60,454	1,32,14,774	9·21	56,14,176	13,45,763	+62,54,835
1893	14,30,06,325	2,26,33,265	1,33,25,640	9·32	57,00,808	13,24,918	+62,99,914
1894	14,72,89,588	2,51,44,200	1,54,75,342	10·51	58,77,844	15,63,148	+80,34,350
1895	15,55,56,871	2,45,42,974	1,44,02,358	9·57	59,78,606	16,21,635	+68,02,117
1896	15,03,03,348	2,10,21,002	1,13,79,307	7·57	60,63,242	9,93,351	+43,23,214
1897	14,94,51,054	1,84,74,358	1,00,97,008	6·76	60,48,581	5,09,720	+35,38,707
1898	15,03,74,750	2,23,17,315	1,19,05,991	7·91	60,77,309	9,53,967	+48,74,715
1899	15,14,26,773	2,60,94,541	1,47,30,148	9·73	60,92,658	9,92,364	+76,45,126
1900	15,31,25,211	2,91,75,054	1,60,55,050	10·48	61,35,151	21,67,610	+77,52,289
1901	15,43,58,624	2,78,62,296	1,43,89,645	9·05	61,89,498	13,785	+86,86,362
1902	15,64,35,445	2,58,95,694	1,36,25,409	8·65	62,80,315	...	+73,45,042
1903	15,78,81,717	2,27,25,664	1,19,42,360	7·18	62,84,957	5,644	+50,51,759

* Includes the Godhra-Ratlam-Nagda railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	Rajputana-Malwa, 3′ 3⅜″.		Holkar and Sindia-Neemuch, 3′ 3⅜″.		Western Rajputana, 3′ 3⅜″		Rewari-Ferozepore, 3′ 3⅜″.		Muttra-Hathras, 3′ 3⅜″.		Cawnpore-Farukhabad, 3′ 3⅜″.		Muttra-Achnera, 3′ 3⅜″.		Cawnpore-Achnera, 3′ 3⅜″.		Godhra-Rutlam-Nagda, 5′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1873	82	96·59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	69	80·37	60	84·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	98	64·94	123	91·71	...	...	...	...	108	58·18	...	...	...	...	...	...	...	...
1876	114	65·40	99	92·87	...	...	...	...	55	57·74	...	...	...	...	...	...	...	...
1877	130	67·99	86	76·86	...	...	...	...	66	54·86	...	...	...	...	...	...	...	...
1878	136	61·97	122	67·50	...	...	...	...	65	53·33	...	...	...	...	...	...	...	...
1879	153	66·74	128	74·58	86	86·08	...	...	86	54·97	...	...	...	...	...	...	...	...
1880	152	66·88	118	74·74	151	85·79	...	...	89	57·35	18	233·15	...	...	...	...	...	...
1881	189	60·41	132	69·11	...	...	...	...	96	69·19	65	69·76	39	89·01	...	...	...	...
1882	188	53·07	...	...	...	...	...	...	84	76·97	80	67·36	57	86·42	...	...	...	...
1883	219	52·18	...	...	...	...	75	81·28	...	...	...	...	...	...	*80	63·98	...	...
1884	223	56·92	...	...	...	...	96	67·28	...	...	...	...	...	...	81	69·17	...	...
1885	224	52·81	...	...	...	...	...	...	...	...	...	...	...	...	70	87·87	...	...
1886	212	50·27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	191	50·84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	215	48·26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	230	45·82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	200	50·41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	251	43·47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	257	41·01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	259	41·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	41·61
1894	285	38·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	106	40·64
1895	269	40·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	184	57·01
1896	227	44·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	189	62·27
1897	212	46·66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146	72·62
1898	241	42·83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	181	51·14
1899	285	42·06	...	...	...	...	...	...	...	...	...	...	...	...	...	...	172	58·34
1900	317	43·18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	219	46·84
1901	313	46·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156	45 15
1902	291	47·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140	46·27
1903	253	49·16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147	48·29

3 (*l*) Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Vijapur to Kalol	23-5-99	10-6-02	29·44		1902	29
Kalol to Kadi	29-3-01	13-7-03	11·93		1903	41
TOTAL	...	...	...	41·37		

Details of construction—

Permanent-way.—16 miles are laid with 41½ lb. flat-footed steel rails and 25 miles with 40 lb. flat-footed iron rails on deodar sleepers.

Ballast.—On the Vijapur-Kalol section, the line is ballasted with broken stone ballast, 4 cubic feet per foot run from mile 0·16 to 16·25 and from mile 25 to 29; and kunkur ballast from mile 16·25 to 25 and at all station yards. The Kalol-Kadi section is ballasted with shingle ballast only.

Fencing.—Fencing is provided from Kalol to Randheja and at station yards.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradient.—The ruling gradient is 1 in 150.

* Includes the Muttra-Hathras, Cawnpore-Farukhabad and Muttra-Achnera railways.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*l*) Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following—

Agreement of—23rd November 1903 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	7,534	...	...	...	...	...
1900	29,885	...	...	...	...	...
1901	6,60,716	...	...	...	...	...
1902	10,47,188	19,514	9,226	1·18	23	52·72
1903	11,84,246	56,916	28,782	2·43	31	49·43

3 (*m*) Gaekwar's Dabhoi railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Miyagam to Dabhoi	21-3-72	8-4-73	20·00		1873 to 1878	20
Dabhoi to Chandod	27-11-77	15-4-79	10·62			
Dabhoi to Bahadarpur		17-9-79	9·64			
Dabhoi to Goya Gate	29-1-79	1-7-80	17·00		1879	40
Goya Gate to Vishvamitri		24-1-81	1·68		1880	57
Bahadarpur to Bodeli	Sept. 1883	16-6-90	12·77		1881	60
Vishvamitri to Padra	28-8-95	1-7-97	7·14		1882 to 1889	59
Padra to Mobha	18-1-02	10-7-03	9·20			
TOTAL OPEN MILEAGE	...	...	...	88·06	1890 to 1896	72
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					1897 to 1902	79
Mobha to Kanjat	24-1-03	*31-5-04	6·49	6·49	1903	88
GRAND TOTAL	...	...	...	94·49		

Details of construction—

Permanent-way.—The line was laid originally with 30 lb. iron rails for 20 miles, and with 30 lb. and 31 lb. steel rails for 39·25 miles and 12·50 miles, respectively, on wooden sleepers. The renewals are being made with 31 lb. steel rails. The Vishvamitri-Mobha section is laid with 31 lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone, kunkur or sand.

Fencing.—There is no fencing, except what has been put up by the villagers themselves.

Curves.—There are no curves with a radius of less than 500 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

* Probable date of opening.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*m*) Gaekwar's Dabhoi railway (2′ 6″)—*concld.*

Terms of contracts—*concld.*

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Baroda State.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, *plus* 12½ per cent. of total working expenses (but not less than Rs. 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.
	Rs.	Rs.	Rs.	
1879	9,62,450	72,083	31,608	3·28
1880	11,65,540	1,28,825	65,138	5·59
1881	12,57,448	1,41,233	48,849	3·88
1882	12,78,942	1,44,022	46,747	3·66
1883	12,78,630	1,46,970	38,585	3·05
1884	12,80,177	1,49,091	48,560	3·80
1885	13,11,229	1,52,283	55,623	4·24
1886	13,58,102	1,58,699	39,393	2·90
1887	13,46,259	1,56,352	47,339	3·52
1888	13,74,295	1,45,757	43,854	3·19
1889	16,10,398	1,42,989	49,398	3·07
1890	17,53,877	1,95,023	74,570	4·25
1891	17,94,157	2,01,165	68,126	3·80
1892	18,47,403	3,38,609	1,06,510	5·77
1893	18,55,156	2,32,106	1,32,507	7·14
1894	18,88,774	2,40,316	95,429	5·05
1895	19,08,757	2,34,473	96,764	5·02
1896	20,74,756	2,58,788	1,25,657	6·06
1897	21,08,574	2,20,901	50,949	2·42
1898	21,18,491	2,10,240	−26,592	...
1899	21,17,596	2,45,974	87,571	4·14
1900	21,17,528	2,55,281	61,606	2·44
1901	21,14,802	2,53,936	73,427	3·47
1902	22,34,829	2,32,573	76,367	3·62
1903	23,60,528	2,60,550	*7,467	0·32

TABLE II.

Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	
1873	21	98·34
1874	32	75·78
1875	33	78·11
1876	38	75·35
1877	45	78·20
1878	43	82·42
1879	46	56·15
1880	51	49·44
1881	46	65·41
1882	47	67·54
1883	48	73·75
1884	49	67·43
1885	50	63·47
1886	50	74·37
1887	51	69·73
1888	48	69·91
1889	47	65·45
1890	57	61·76
1891	54	66·13
1892	64	55·36
1893	68	47·14
1894	65	60·29
1895	63	58·73
1896	69	51·44
1897	56	76·94
1898	51	112·65
1899	60	64·40
1900	57	73·82
1901	62	71·08
1902	54	65·69
1903	60	97·13

(3) (*n*) Rajpipla railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Anklesvar to Raj-Pardi	Oct. 1894	1-7-97	19·03		1897	19
Raj-Pardi to Umalla	Feb. 1898	19-1-99	4·95		1898	19
Umalla to Amletha		1-6-99	7·85			
Amletha to Nandod		20-7-99	5·54		1899 to 1903	37
TOTAL	...	...	...	37·37		

*The decrease was due principally to the cost of 3 engines having been charged to Revenue.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*

3 (*n*) Rajpipla railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 41½ lb. flat-footed iron rails on half-round jungle teak sleepers.

Ballast.—With the exception of a short length of gravel ballast, the line is ballasted with coarse river sand.

Fencing.—There is no fencing, except at station yards.

Curves.—There are no curves with a radius of less than 1,432 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under—

Agreement of—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Rajpipla State.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per measem or more than Rs. 800 per measem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	12,674	...	...	...	...	...
1895	17,265	...	...	...	...	...
1896	4,09,141	...	...	...	...	...
1897	7,55,792	5,705	—6,534	...	11	214·53
1898	11,03,333	10,624	—9,172	...	11	186·53
1899	13,07,820	35,309	8,478	0·65	22	76·32
1900	13,10,159	49,463	12,139	0·93	25	75·46
1901	13,06,322	47,182	10,487	0·80	24	77·77
1902	13,05,415	38,726	10,131	0·78	20	73·84
1903	13,04,281	44,830	10,674	0·82	23	76·19

3 (*o*) Jaipur (Siwai-Madhopur) railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sanganer to Siwai-Madhopur in the Jaipur State	2-12-97	...	72·85	72·85

The line is the property of the Jaipur State. Its completion has been deferred for want of funds. It has been proposed that the line, when completed, should be worked by the Bombay, Baroda and Central India Railway Company.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 4 / Sub-heads (*a*) to (*e*). **EASTERN BENGAL STATE RAILWAY SYSTEM.**

Lines comprising system.—The Eastern Bengal State railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Eastern Bengal State railway, Eastern and Southern sections (5′ 6″ gauge)	278·68	105·75	384·43
(*b*) Brahmaputra-Sultanpur Branch railway (3′ 3⅜″ gauge)	59·37	...	59·37
(*c*) Eastern Bengal State railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3⅜″ gauge)	584·41	195·87	780·28
(*c*) Teesta-Kurigram branch and British section of the Santrabari Extension (2′ 6″ gauge)	34·78	...	34·78
(*d*) Mymensingh-Jamalpur-Jagannathganj railway (3′ 3⅜″ gauge)	52·70	...	52·70
(*e*) Cooch-Behar railway (2′ 6″ gauge)	33·60	...	33·60
	1,043·54	301·62	1,345·16

Running powers—

Foreign lines over home line :—

East Indian railway, Kidderpore Docks to Naihati and to Chitpur	34·50
Bengal Central railway, Dum Dum Junction to Canal Junction	1·61
" " " Canal Junction to Calcutta	2·96
" " " Canal Junction to Chitpur	2·00
" " " Calcutta to Kidderpore Docks	7·31
	48·38

The line from Calcutta to Port Canning, which was the property of the Calcutta and South Eastern Railway Company, was purchased by the State on the 1st April 1868. The line from Calcutta to Goalundo was also purchased by the State from the Eastern Bengal Railway Company on the 1st July 1884; and on the same date the existing branch line from Poradaha to Damukdia was permanently amalgamated therewith. From the 1st April 1887 the Calcutta and South Eastern railway, the Eastern Bengal railway with the branch to Damukdia, the Northern Bengal (Sara to Siliguri, Parbatipur to Kaunia, Parbatipur to Dinajpore), the Kaunia-Dharlla (Kaunia to Jatrapore and Megalhat), the Dacca (Narayanganj to Mymensingh) and the Assam-Behar (Manihari to Kasba) railways were amalgamated, and have been worked as one system known as the Eastern Bengal State railway system.

The Kaunia-Dharlla branch was constructed by the Bengal Government out of Provincial revenues. At Dhubri a connection is made with the Assam steamer services run by the India General and River Steam Navigation Company. The Dacca section is connected with the Eastern section by a ferry worked by the India General Steam Navigation Company between Goalundo and Narayanganj ghat.

The Northern and Eastern sections are connected by a steam ferry worked by the railway between Sara ghat and Damukdia ghat.

The East Indian railway is connected with the Bengal system of railways by a ferry worked by the East Indian railway across the Ganges between Manihari and Sahebgunge. A branch line runs northwards from Katihar Junction through Purnea and Kasba to Anchra ghat on the Kosi, opposite Khanwa ghat on the Kosi extension of the Tirhoot railway. The Eastern Bengal State railway is also connected with the Bengal and North-Western railway at Katihar.

4 (*a*) Eastern Bengal State railway, Eastern and Southern sections (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
EASTERN SECTION—			Miles.	Miles.		Miles.
Main line—						
Calcutta to Ranaghat	16-4-59	29-9-62	45·25		1862	122
Ranaghat to Jagati Junction		15-11-62	62·00		1863	135
Jagati Junction to 145th mile	1865-66	1-1-71	37·82		1864	139
					1865	139
Total main line	...	...	...	145·07	1866	139
Branches—						
Jagati Junction to river Ganges (*Kooshtea branch*)	...	16-2-64	3·77		1867	139
Kooshtea loop line	...	1-8-81	1·17		1868	139
Canal Junction to Chitpore (*Chitpore branch*)	12-4-73	25-8-75	1·88		1869	139
Portion in Chitpore yard for goods traffic	...	13-4-88	0·12		1870	139
Panchooria Junction to new Goalundo	...	22-10-98	6·38		1871	184
Mile 145 to Panchooria Junction	...	1-4-90	3·16			
Panchooria Junction to Shivarampore	Feby. '97	20-10-98	3·77		1872	184
Shivarampore to Faridpore		9-4-99	7·43		1873	186
Belgachhi to the Ganges	Feby. '96	27-10-98	2·30		1874	186
Bhydea Junction to Borat	...	7-6-97	3·17		1875	186
Churni Extension	...	1-1-02	1·50		1876	186
Extensions to Chitpore Terminus (Belgachhi to Cossipore)	Mar. '01	1-3-03	0·63			
		1-9-03	0·98		1877	186
					1878	186
Poradaha branch—					1879	186
Poradaha to Bhairamara	4-4-76	19-1-78	11·79		1880	186
Bhairamara to Golabnuggur (Damukdia)	22-9-83	8-12-83	7·41		1881	187
Gealbathan Extension	...	1-1-03	2·28			
					1882	203
Total branches	...	...	...	62·79	1883	216
					1884	233*
TOTAL, EASTERN SECTION, CARRIED OVER	...	...	...	207·86		

* Includes the Poradaha branch which was amalgamated with the Eastern section from 1884.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 4 / Sub-heads (*a*) to (*e*) · **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (*a*) Eastern Bengal State railway, Eastern and Southern sections (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Brought forward, total Eastern section	...	...	...	207·86		
SOUTHERN SECTION—						
Main line—						
Calcutta to Champahati	...	2-1-62	15·00		1885	235
					1886	235
Champahati to Port Canning	...	15-5-63	12·79		1887	235
					1888	231
Junction with Eastern section	...	15-3-85	0·41		1889	231
Bansra diversion	Jany. 1900	5-3-00	0·25			
Bansra diversion extension	...	17-11-02	0·75			
					1890	249
Total main line	...	...	...	29·20	1891	248
					1892	248
Branches—					1893	249
Diamond Harbour branch—						
Sonarpur to Baruipur	9-9-80	10-6-82	5·30		1894	249
Baruipur to Magra Hat		18-12-82	9·55			
Magra Hat to Diamond Harbour	...	25-4-83	12·69			
Diamond Harbour towards Hara Fort	...	25-4-83	0·42		1895	249
					1896	249
			27·96		1897	254
					1898	263
Budge Budge branch—						
Ballygunge to Budge Budge	Nov. '83	1-5-90	13·66		1899	268
Total branches	...	...	...	41·62		
					1900	268
TOTAL, SOUTHERN SECTION	...	...	...	70 82	1901	268
					1902	277
TOTAL OPEN MILEAGE, EASTERN BENGAL STATE EASTERN AND SOUTHERN SECTIONS.	...	...	...	278·68	1903	279
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Eastern section—						
Pnachooria Junction to river Ganges	12-2-96	...	†6·00			
Kankurgachi Chord (Kankurgachi to Gobra)	19-2-02	*30-6-05	2·25			
Ranaghat to Murshidabad	20-6-02	*Dec. 1904	75·00			
Murshidabad to Jeaganj	23-9-03	...	6·00			
Jeaganj to Lalgola	23-9-03	...	16·50			
TOTAL LINES UNDER CONSTRUCTION	...	...	105·75	105·75		
GRAND TOTAL, 5′ 6″ GAUGE	...	...	...	384·43		
DOUBLE LINE, EASTERN AND SOUTHERN SECTIONS—						
Calcutta to Naihati	July '83	1-3-86	23·23			
		21-3-87	0·26			
Naihati to Kanchrapara	May '91	20-4-92	4·69			
Kanchrapara to Ranaghat	Oct. '91	12-11-92	17·56			
		7-8-97	5·50			
Ranaghat to Aranghata		17-9-97	6·75			
Aranghata to Bogoola		3-11-97	6·65			
Bogoola to Shibnibash	Dec. '95	17-11-98	0·75			
Shibnibash to Ramnagar		17-9-97	9·50			
Ramnagar to Poradaha		7-8-97	27·58			
Canal Junction to Chitpore		13-4-88	1·88			
Sealdah to Ballygunge	July '86	20-10-88	3·50			
		19-9-90	0·36			
Ballygunge to Dock Junction	Novr.' 89	20-11-93	4·00			
TOTAL DOUBLE LINE, EASTERN AND SOUTHERN SECTIONS	...	...	112·21			

Details of construction—

Permanent-way.—On the Eastern section the rails are double-headed steel, 73 lb., 75 lb. and 85 lb. to the yard on cast iron plate and sal sleepers. The Faridpur branch is laid with second hand iron rails, 72 lb. and 68 lb. to the yard, on timber sleepers. On the Damukdia branch, the old iron rails are being replaced by 73 lb. steel rails removed from the main line. The sleepers are mostly cast iron bowls. The Diamond Harbour and Budge Budge branches are laid with steel rails 64 lb. and 73 lb. to the yard, on cast iron sleepers, and the Canning branch with iron rails on cast iron and wooden sleepers.

Ballast.—The line is ballasted throughout with the exception of the Faridpur branch.

Bridges.—See Appendix 36.

Fencing.—The Eastern section is fenced throughout; and the total length of fencing provided on the Southern section, including the Budge Budge extension, is 52·07 miles. The Canning branch in unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts.—Nil. The line is owned and worked by the State.

Statistics of working.—See page 197.

* Probable date of opening.
† Constructed but not opened.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (e)}}$. **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (c) Eastern Bengal State railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
NORTHERN SECTION—			Miles.	Miles.		Miles.
Main line—						
Sara to Atrai	12-2-74	19-1-78	38·75		1877	134
Atrai to Jalpaiguri		28-8-77	134·25		1878	232
Jalpaiguri to Siliguri		10-6-78	23·85		1879	244
					1880	214
Total main line	...	...	196·85		1881	246
Branches—						
Rungpore branch—					1882	246
Parbatipur Junction to Shampur	...	19-5-78	15·25		1883	256
Shampur to Rungpore	12-2-74	2-7-78	7·50		1884	249*
Rungpore to Kaunia	...	1-6-79	11·25		1885	334
			34·00		1886	334
Dinagepore branch—					1887	373
Parbatipur to Chirir bandar	28-11-81	1-7-83	9·92		1888	405
Chirir bandar to Dinagepore		16-5-84	8·75		1889	478
			18·67		1890	478
					1891	492
Teesta bridge at Kaunia and approaches	6-3-97	1-4-01	4·42		1892	522
Total, branches	...	...	57·09		1893	527
					1894	527
Total, Northern section	...	...	...	253·94	1895	528
					1896	528
BEHAR SECTION—						
Main line—						
Manihari to Katihar	...	1-4-87	14·09		1897	527
Katihar to Rayganj	...	1-7-89	37·49		1898	527
Rayganj to Dinagepore	...	15-2-88	32·68		1899	527
Junction with the Bengal and North-Western railway at Katihar	...	8-3-01	0·69		1900	528
					1901	545
Total main line	...	...	84·95			
Branches—						
					1902	586
Kosi branch—					1903	584
Katihar to Kasba	...	1-4-87	22·16			
Kasba to Forbesganj	...	1-7-89	36·81			
Forbesganj to Ancharaghat	...	1-1-91	14·99			
			73·90			
Barsoi-Kissenganj branch—						
Barsoi to Kissenganj	June '91	15-12-92	35·11			
Total branches	...	...	109·01			
TOTAL, BEHAR SECTION	...	...	...	193·96		
DACCA SECTION—						
Narayanganj ghat to Dacca	11-3-82	4-1-85	10·25			
Dacca to Jaydebpur		1-3-85	19·65			
Jaydebpur to Gafargaon		1-3-85	32·50			
Gafargaon to Mymensingh		1-3-85	23·52			
TOTAL, DACCA SECTION	...	...	...	85·92		
KAUNIA-DHUBRI SECTION—						
Teesta Junction to Mogalhat†	Sept. '99	1-4-01	12·04			
Mogalhat to Gitaldaha Junction		2-1-02	1·86			
Gitaldaha Junction to Dhubri		23-9-02	36·69			
TOTAL, KAUNIA-DHUBRI SECTION	...	...	...	50·59		
TOTAL MILEAGE OPEN, EASTERN BENGAL STATE RAILWAY, NORTHERN, BEHAR, DACCA AND KAUNIA-DHUBRI SECTIONS (3′ 3⅜″ GAUGE).	...	...	...	584·41		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
NORTHERN SECTION—						
Dhubri-Gauhati extension—						
Golokganj to Salmara Road	31-10-02	‡ April '05	55·00			
Salmara Road to the Brahmaputra opposite Gauhat		...	96·62			
Kaunia-Bonarpara extension—						
Kaunia to Bonarpara	17-7-03	‡ 1-1-05	44·25			
Total lines under construction	...	...	...	195·87		
GRAND TOTAL (3′ 3⅜″ GAUGE)	...	...	...	780·28		

* Excludes the Poradaha branch transferred to the Eastern section from 1884.

† Portion of Kaunia-Dharlla branch converted from 2′ 6″ gauge. Original dates of sanction and opening of the 2′ 6″ gauge line were 20th November 1875 and 6th February 1882, respectively. See also remarks under 4 (c) on the next page.

‡ Probable date of opening.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 4 / Sub-heads (a) to (e). **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (*c*) Eastern Bengal State railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The rails are flat-footed, steel 41¼ lb. and 50 lb. and iron 40 lb. to the yard, laid chiefly on sal, asna, ironwood, teak, steel and cast iron sleepers.

Ballast.—The line is, with some few exceptions, ballasted throughout.

Bridges.—See Appendix 36.

Fencing.—The whole of the Northern section is fenced. The Dacca section is unfenced except at stations and for 13½ miles from Narayanganj. The Behar section is fenced throughout, with the exception of the Barsoi-Kissenganj branch.

Curves.—On the Kaunia-Dhubri section the sharpest curve has a radius of 716 feet and is 0·11 mile in length.

Gradients.—The ruling gradient is 1 in 162.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See page 197.

4 (*c*) Eastern Bengal State railway, Teesta-Kurigram branch and British section of the Santrabari extension (2′ 6″ gauge)—

The Teesta-Kurigram branch was originally a portion of the 2′ 6″ gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharlla branch. The line from Teesta Junction to Mogalhat has been converted to the 3′ 3⅜″ gauge and shown on the previous page under the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Teesta-Kurigram branch—			Miles.	Miles.		Miles.
Teesta Junction to Kurigram	...	18-7-81	14·99		1881	21
					1882	34
TOTAL, TEESTA-KURIGRAM BRANCH	...	...	...	14·99	1883	32
Santrabari extension of the Cooch Behar State railway (British section)—					1884 to 1899	37
South Bank of Kaljani river to Alipur Duar	Dec. 97	18-1-00	0·64			
Alipur Duar to Raja Bhat Khawa		5-4-00	9·97		1900	47
Raja Bhat Khawa to Jhainti		1-2-01	9·18		1901	41
					1902	35
TOTAL, SANTRABARI EXTENSION OF THE COOCH BEHAR STATE RAILWAY (BRITISH SECTION)	...	...	...	19·79	1903	35
GRAND TOTAL (2′ 6″ GAUGE)	...	...	...	34·78		

Details of construction—

Permanent-way.—The rails are flat-footed. The Teesta-Kurigram branch is laid with steel rails, 25 lb. to the yard, on sal sleepers; and the British section of the Santrabari extension is laid partly with iron rails, 40 lb. to the yard, and partly with steel rails, 41¼ lb. to the yard, on sal sleepers.

Ballast.—The line is unballasted.

Fencing.—The line is unfenced.

Curves.—Several curves with a radius of less than 1,000 feet occur on the Teesta-Kurigram branch, their radii varying from 425 to 955 feet with an aggregate length of 6,580 feet or 1·25 miles. On the Santrabari extension there is a curve of 637 feet radius.

Gradients.—The ruling gradient is 1 in 50.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See page 197.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 4 / Sub-heads (*a*) to (*e*). **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (*a*) and (*c*) Eastern Bengal State railway (5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge sections)—*concld.*

Statistics of working—

TABLE I.*

Calendar year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	6,23,44,476	60,22,272	25,79,314	4·14	28,51,165	...	3,67,326	—6,39,177
1880	6,33,72,354	66,91,060	33,75,186	5·33	29,27,692	...	5,34,950	—87,456
1881	6,39,51,905	75,05,736	42,86,406	6·70	28,50,922	...	8,24,125	+6,11,359
1882	6,50,12,846	85,79,404	47,17,459	7·26	27,92,607	...	8,95,329	+10,29,523
1883	7,01,85,023	80,73,465	47,10,716	6·70	29,48,783	...	4,98,223	+12,54,710
1884	6,58,68,060	78,12,979	24,80,526	3·77	15,92,486	8,50,920	...	+5,87,120
1885	7,31,60,273	72,85,916	25,25,336	3·45	21,82,794	7,22,920	...	—3,80,378
1886	8,00,56,752	82,73,918	30,89,720	3·86	24,34,239	19,04,750	...	—12,49,269
1887	8,11,53,166	94,30,399	45,04,782	5·55	41,71,008	14,90,152	...	—11,56,378
1888	8,59,09,629	1,05,19,210	55,25,424	6·44	28,83,744	20,11,011	...	+6,30,669
1889	8,79,71,516	1,11,76,674	61,91,625	7·04	30,18,703	20,48,953	...	+11,28,969
1890	10,00,68,626	1,14,78,382	60,70,323	6·07	30,96,150	18,14,110	...	+11,60,063
1891	10,31,46,023	1,26,75,440	65,32,100	6·33	23,01,166	19,48,198	...	+13,82,736
1892	10,60,47,429	1,15,56,446	62,38,727	5·88	38,86,181	16,53,922	...	+ 6,98,624
1893	10,68,29,000	1,20,51,147	66,35,138	6·21	39,53,310	16,49,485	...	+10,32,643
1894	10,73,52,685	1,40,15,726	83,53,559	7·78	41,01,624	18,91,850	...	+23,60,035
1895	10,71,92,132	1,45,09,739	89,74,474	8·37	41,50,415	18,72,565	...	+29,51,494
1896	10,97,80,613	1,50,81,670	90,02,286	8·20	41,06,132	17,56,150	...	+31,40,001
1897	11,47,69,205	1,47,62,238	80,66,612	7·02	42,80,503	16,58,278	...	+21,26,831
1898	11,78,54,619	1,47,17,879	83,35,064	7·07	43,39,856	15,75,020	...	+23,70,688
1899	12,16,49,777	1,56,12,486	83,01,083	6·82	45,00,276	15,62,391	...	+22,38,416
1900	12,58,52,617	1,71,00,460	92,46,424	7·35	47,02,516	15,66,769	...	+29,77,139
1901	13,19,95,226	1,65,99,440	83,08,281	6·29	41,11,665	23,37,123	...	+18,59,493
1902	13,99,82,391	1,78,93,098	91,48,340	6·54	44,25,883	23,29,895	...	+23,92,562
1903	14,91,79,763	1,81,52,429	88,57,094	5·94	47,10,867	23,33,377	...	+18,12,850

TABLE II.

Calendar year.	4 (*a*) Eastern and Southern sections.				4 (*c*) Northern, Behar and Dacca sections.							
	Eastern and Southern sections (5′ 6″ gauge).		Calcutta and South-Eastern section (5′ 6″ gauge).		Northern Bengal State (3′ 3⅜″ gauge).		Kaunia-Dharlla (2′ 6″ gauge).		Northern, Behar and Kaunia-Dhubri sections including the Teesta-Kurigram branch and the British section of the Santrabari extension (3′ 3⅜″ and 2′ 6″ gauges).		Dacca section (3′ 3⅜″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1862	94	55·59	36	128·39	..	...	...	...	...	...	...	...
1863	149	48·43	38	131·07	...	...	...	...	...	...	...	...
1864	176	53·67	58	137·03	...	...	...	...	...	...	...	...
1865	233	43·98	73	114·32	...	...	...	...	...	...	...	...
1866	243	51·05	79	118·59	...	...	...	...	...	...	...	...
1867	279	48·71	64	138·60	...	...	...	...	...	...	...	...
1868	308	46·33	60	179·12	...	...	...	...	...	...	...	...
1869	313	50·29	55	145·54	...	...	...	...	...	...	...	...
1870	335	55·69	55	104·88	...	...	...	...	...	...	...	...
1871	270	56·01	40	90·82	...	...	...	...	...	...	...	...
1872	344	66·60	40	92·07	...	...	...	...	...	...	...	...
1873	337	49·08	70	102·56	...	...	...	...	...	...	...	...
1874	433	52·18	68	78·35	...	...	...	...	...	...	...	...
1875	356	62·16	71	80·48	...	...	...	...	...	...	...	...
1876	401	48·66	68	108·62	...	...	...	...	...	...	...	...
1877	529	41·07	79	81·74	20	140·29	...	...	...	...	...	...
1878	512	43·71	83	75·08	81	75·31	...	...	...	...	...	...
1879	494	45·97	92	66·44	101	99·96	...	...	...	...	...	...
1880	540	44·81	98	71·32	94	60·10	...	...	...	...	...	...
1881	621	40·91	104	66·43	137	51·23	...	...	...	...	...	...
1882	611	40·60	130	97·42	160	49·04	25	92·97	...	...	...	...
1883	466	50·14	109	54·97	169	49·20	33	81·49	...	...	...	...
1884	§	54·06	§	§	156	69·93	39	78·26	...	...	...	...
1885	380	61·25	†	†	153	70·16	31	107·29	...	...	47	141·12
1886	403	61·97	...	...	189	52·85	29	122·87	...	...	56	111·47
1887	268	52·23	...	...	†	†	†	†	†	†	†	†
1888	546	47·47	...	...	...	...	...	...	†	†	†	†
1889	563	44·60	...	...	...	...	...	...	†	†	†	†
1890	521	47·12	...	...	...	...	...	...	†	†	†	†
1891	562	43·61	...	...	...	...	...	...	181	55·18	93	62·10
1892	562	44·32	...	...	...	...	...	...	165	47·32	85	64·40
1893	529	43·74	...	...	...	...	...	...	182	45·17	96	62·41
1894	621	40·33	...	...	...	...	...	...	191	39·14	112	54·46
1895	649	35·97	...	...	...	...	...	...	199	40·29	120	51·49
1896	676	39·74	...	...	...	...	...	...	212	40·04	115	53·27
1897	678	46·48	...	...	...	...	...	...	195	42·44	114	55·92
1898	652	41·86	...	...	...	...	...	...	201	44·88	129	51·68
1899	649	49·30	...	...	...	...	...	...	218	42·21	131	55·78
1900	689	47·75	...	...	...	...	...	...	245	42·14	146	58·83
1901	678	50·89	...	...	...	...	...	...	225	46·91	157	65·12
1902	728	48·18	...	...	...	...	...	...	235	48·65	146	62·12
1903	707	50·27	...	...	...	...	...	...	239	50·14	144	78·25

* Includes the Eastern, Southern, Northern, Behar, Dacca, Kaunia-Dhubri, Teesta-Kurigram sections and the British section of the Santrabari extension.

† Included with the Eastern and Southern sections.

§ Information not available.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 4 / Sub-heads (*a*) to (*e*) **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (*b*) Brahmaputra-Sultanpur Branch railway (3′ 3⅜″ gauge).—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Santahar to Bogra	Oct. '96	1-4-99	24·50		1899	24
Bogra to Dewantola		5-4-00	22 02		1900	
Dewantola to Bonarpara		1-8-00	4·60		to	59
Bonarpara to Fulchhasi		1-9-00	8·25		1903	
Total	...	...	...	59·37		

Details of construction—

Permanent-way.—The rails are flat-footed, steel 41¼ lb. and 50 lb. and iron 40 lb. to the yard, laid chiefly on sal, asna, ironwood, teak, steel and cast iron sleepers.

Ballast.—The line is, with some few exceptions, ballasted throughout.

Fencing.—The line is unfenced except at stations and through the town of Bogra.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 162.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—3rd December 1896 (between the Secretary of State and the Brahmaputra-Sultanpur Branch Railway Syndicate) for the formation of a Company for the construction of the line.

8th January 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch Railway Syndicate) for the subscription of capital for the construction of the line.

22nd February 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch Railway Company) for the construction and working of the line.

The general conditions of the contracts are as follows :—

Government aid.—Interest is guaranteed at 3 per cent. on the Company's capital. Land was also provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice, either on the 31st December 1919, or at the end of a subsequent period of 10 years, or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings during the five years prior to determination, not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), paying the total amount of such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—Government charge 45 per cent. of the gross earnings for working expenses which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile in each half-year. After providing from the net earnings for repayment to Government of interest at the rate of 3 per cent. per annum on the actual expenditure, the balance is divided in equal proportions between Government and the Company.

The Company were also allowed, until the minimum dividend of 3 per cent. was earned by the line, Rs. 5,000 for each year for or towards the office expenses and the expenses of management; and also all such legal expenses as are properly debitable to revenue.

Rates and fares.—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal State railway.

Statistics of working—

Table I.								Table II.	
Calendar year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1897	2,02,919	...	...	...	†	...	...	...	...
1898	12,55,457	...	...	...	†	...	...	...	...
1899	19,58,137	36,900	*	...	†	...	...	38	45·00
1900	24,20,811	1,36,587	*	...	†	...	...	58	45·00
1901	28,27,619	1,96,848	61,375	2·17	42,414	...	+18,961	64	45·00
1902	29,17,993	2,40,424	1,32,233	4·53	86,750	9,480	+36,003	78	45·00
1903	29,42,486	2,54,379	1,33,908	4·75	88,185	22,742	+28,981	82	45·00

* Paid over to the Company.
† Interest was charged to capital.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (e)}}$ **EASTERN BENGAL STATE RAILWAY SYSTEM—*contd.***

4 (*d*) Mymensingh-Jamalpur-Jagannathganj Branch railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mymensingh to Singhjani	Novr. '96	15-10-98	33·07		1898	33
Singhjani to Jagannathganj		15-10-99	19·63		1899 to 1903	53
TOTAL	...	...	...	52·70		

Details of construction—

Permanent-way.—The rails are flat-footed, steel 41¼ lb. and 50 lb. and iron 40 lb. to the yard, laid chiefly on sal, asna, ironwood, teak, steel and cast iron sleepers.

Ballast.—The line is, with some few exceptions, ballasted throughout.

Fencing.—The line is unfenced except at stations and through the town of Mymensingh.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 162.

Terms of contracts—

The Mymensingh-Jamalpur-Jagannathganj Branch railway is worked under the following contracts :—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj Branch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj Branch railway office from Calcutta to London.

The general conditions of the contracts are as follows :—

Government aid.—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal State railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal State railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land has also been provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of a subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, not exceeding by more than 20 per cent., or not being less than, the total capital expenditure ; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fares.—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal State railway.

Statistics of working—

	Table I.							Table II.	
Calendar year. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic receipts. (4)	Percentage on capital outlay. (5)	Rebate from E. B. S. Ry. (6)	Total income. (7)	Percentage of (7) on (2). (8)	Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	1,950	...	...	...	...	...	...	...	...
1897	5,54,688	...	...	...	...	...	...	...	...
1898	10,44,638	7,660	4,213	0·40	...	4,213	0·40	27	45·00
1899	16,11,248	66,499	36,575	2·27	...	36,575	2·72	35	45·00
1900	18,78,395	1,62,028	89,116	4·74	...	89,116	4·74	58	45·00
1901	20,84,346	1,67,756	92,265	4·43	...	92,265	4·43	60	45·00
1902	22,85,677	2,05,251	1,12,888	4·94	...	1,12,888	4·94	74	45·00
1903	22,01,173	2,22,325	1,24,993	5·68	...	1,24,993	5·68	82	*45·00

* After deducting expenditure incurred on terminals at Jagannathganj from gross earnings the percentage of working expenses is 43·91.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (e)}}$ **EASTERN BENGAL STATE RAILWAY SYSTEM—*concld.***

4 (*e*) Cooch Behar railway, (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Gitaldaha to Manshahi Junction	28-9-91	15-9-93	18·82		1893 to 1897	19
Manshahi Junction to the town of Cooch Behar	30-8-95	15-12-98	3·22			
Torsa bridge	...	16-5-00	0·11			
Total main line	...	...	...	22·15	1898	22
Branch—					1899	33
Cooch Behar-Santrabari extension (Native State section)—						
Cooch Behar to temporary Alipur Duar (Kholta)	20-12-97	15-4-99	10·96		1900 to 1903	34
Temporary Alipur Duar (Kholta) to the south bank of the Kaljani river.		18-1-00	0·49			
Total Branch	...	...	...	11·45		
GRAND TOTAL	...	...	...	33·60		

Details of construction—

Permanent-way.—The Cooch Behar railway is laid for 19·55 miles with steel rails, 25 lb. to the yard; for 1·83 miles with steel rails, 41¼ lb. to the yard, on pyinkado sleepers; and 12·22 miles with 40 lb. iron rails on sal sleepers.

Ballast.—The line is laid without ballast.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 50.

Terms of contracts—

The Cooch Behar railway is worked under the following agreement:—

Agreement—of 15th June 1903 and having effect from the 1st January 1901 (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Cooch Behar State.

Currency of contract.—The Eastern Bengal State railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal State railway, for maintenance and working, to receive 40 per cent. of the gross earnings; provided that when the stock of the Eastern Bengal State railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal State railway will receive and retain up to, but not exceeding 45 per cent., of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares.—The Eastern Bengal State Railway Administration have full control over rates and fares.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	14,685	...	...	...	...	...
1892	4,09,186	...	...	...	...	...
1893	6,65,172	5,846	—2,455	...	13	188·94
1894	7,14,318	40,280	8,576	1·20	35	78·71
1895	7,30,953	53,174	19,200	2·63	46	63·89
1896	7,66,734	70,128	38,570	5·03	61	45·00
1897	9,01,219	64,262	35,344	3·92	51	45·00
1898	10,32,938	66,124	6,687	0·65	57	45·00
1899	12,99,031	82,773	43,073	3·32	53	47·95
1900	12,83,906	94,792	51,602	4·02	50	43·41
1901	13,94,923	1,27,596	74,667	5·35	72	41·48
1902	13,95,766	1,24,741	74,452	5·33	71	40·31
1903	14,91,329	1,42,540	83,834	5·62	82	41·19

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 5 / Sub-heads (a) to (d) **EAST INDIAN RAILWAY SYSTEM—**

ines comprising system.—The East Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) East Indian railway (5′ 6″ gauge)	1,935·11	215·14	2,150·25
(b) Delhi-Umballa-Kalka railway (5′ 6″ gauge)	162·36	...	162·36
(c) South Behar railway (5′ 6″ gauge)	78·76	...	78·76
d) Tarkessur railway (5′ 6″ gauge)	22·23	...	22·23
Total	2,198·46	215·14	2,413·60

tunning powers—

	Miles.
Home line over Foreign lines :—	
Agra East Bank to Agra Fort, Rajputana-Malwa railway	1·00
Kidderpore Docks to Naihati and Chitpur, Eastern Bengal State railway	34·50
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand State railway	10·00
	45·50
Foreign lines over Home line :—	
Bengal-Nagpur railway at Katni	0·30
,, ,, ,, at Asansol	0·50
,, ,, ,, at Howrah	1·00
Indian Midland railway, Agra to Tundla	12·75
,, ,, ,, at Cawnpore	1·49
,, ,, ,, at Manikpur	0·63
,, ,, ,, at Katni	0·38
North Western and Oudh and Rohilkhand State railways, Ghaziabad to Delhi	13·00
	30·05

(*a*) East Indian railway proper (5′ 6″ gauge)—

rogress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
ain line—			Miles.	Miles.		Miles.
Howrah to Hooghly	January '51	15-8-54	23·23			
Hooghly to Pundooah		1-9-54	14·31		1854	38
Pundooah to Khana junction		3-2-55	36·94		1855	120
Khana junction to Raneegunge		3-2-55	45·71		1856	120
Raneegunge to Siarsol	...	21-7-63	1·70		1857	120
Siarsol to Sitarampur	...	1-1-65	15·15			
Sitarampur to Luckeeserai junction	Febv. '66	1-1-71	124·64			
Luckeeserai to Dinapore	...	17-11-62	82·42		1858	139
Dinapore to Moghal Sarai		22-12-62	125·92		1859	286
Moghal Sarai to Mirzapur		1-1-64	89·28		1860	370
Mirzapur to south bank, Jumna		4-4-64	52·64		1861	561
Jumna bridge to Allahabad		15-8-65	2·75		1862	877
Allahabad to Cawnpore		3-3-59	119·47			
Cawnpore to Etawah		1-7-61	86·46			
Etawah to Shikohabad		16-11-61	34·39		1863	933
Shikohabad to Tundla junction		1-4-62	22·92		1864	1,131
Tundla junction to Aligarh		1-3-63	48·56		1865	1,155
Aligarh to Chola (Bulandshahr Road)		1-4-64	35·54		1866	1,155
Chola to Delhi (south bank, Jumna)		1-8-64	41·27		1867	1,389
Delhi terminus		1-1-67	1·78			
			955·08		1868	1,389
					1869	1,389
Loop line—					1870	1,389
Khana junction to river Adjai	...	3-10-58	19·00		1871	1,530
River Adjai to Sainthia		3-9-59	25·12		1872	1,530
Sainthia to Tinpahar		15-10-60	76·12			
Tinpahar to Bhagalpur		1-11-61	69·12			
Bhagalpur to Jamalpur		10-2-62	32·62			
Jamalpur to Luckeeserai		17-11-62	28·41		1873	1,530
					1874	1,530
			250·39		1875	1,530
					1876	1,530
Total main and loop lines	...	...	...	1,205·47	1877	1,530
Branches on main line—						
Bhadreswar branch—						
Bhadreswar junction to the river bank	...	6-12-82	2·60		1878	1,530
					1879	1,588
Hooghly bridge branch—					1880	1,600
Hooghly junction to Naihati	14-1-84	15-3-87	4·22		1881	1,600
Ondal loop—					1882	1,603
Ondal to Babasole	July '82	1-5-64	2·03			
Babasole to Mangalpur		1-1-63	2·74			
Mangalpur to Toposi		2-2-63	2·65			
Toposi to Ikrah junction		15-4-94	2·42		1883	1,605
Ikrah junction to Gourangdi		1-6-95	14·16		1884	1,605
Gourangdi to Alipur	29-3-91	30-3-95	7·54		1885	1,611
					1886	1,671
			31·54		1887	1,610
Ikrah branch—						
Ikrah junction to the Ondal loop	July '82	15-4-94	8·92		1888	1,610
Jharia branch—					1889	1,610
Sitarampur to Barakar	9-3-92	1-1-65	5·43		1890	1,610
Barakar to Katrasgarh	...	*26-5-94	33·80		1891	1,610
			39·23		1892	1,610
Sitarampur-Damohani extension—					1893	1,613
Mile 132 from Howrah to Sitarampore	13-7-99	15-4-02	6·99		1894	1,664
					1895	1,700
Salanpur branch—					1896	1,701
Salanpur to Shamdi	9-3-92	7-9-94	4·29		1897	1,705
		1-1-97	1·24			
			5·53		1898	1,712
					1899	1,711
Chanch branch—	9-3-92	1-2-93	2·88		1900	1,840
From mile 144¼ to Chanch	11-2-96	5-8-96	1·00		1901	1,838
					1902	1,933
			3·88		1903	1,935
Carried over	...	...	102 91	1,205·47		

* The first 7 miles of this extension were worked for coal traffic from the 1st August 1893.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 5 / Sub heads (*a*) to (*d*) **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward	...	...	102·91	1,205·47
Pandra branch—				
From mile 148¾ on Jharia branch to Pandra	4-8-99	26-11-00	3·23	
Damoodur branch—				
Dheria Joba to the Damoodur river	15-1-94	30-6-95	8·00	
		15-7-96	1·77	
			9·77	
Kurhurbaree branch—				
Madhopur junction to Giridih	...	1-1-71	26·70	
Colliery lines—				
Katras-Kanoodih extension—				
Katrasgarh to Kanoodih		7-3-03	7·23	
Jharia-Dhanbaid Chord—				
Jharia to Dhanbaid	9-12-01	1-5-03	3·79	
Katras-Mukera cross connection—				
Northern half of connection		15-8-03	0·67	
			11·69	
Mokameh Ghat branch—				
Mokameh junction to Mokameh Ghat	...	1-5-83	3·70	
Patna-Gya branch—				
Bankipore junction to Bankipore	13-2-78	2-6-79	0·25	
Bankipore to Jehanabad		21-4-79	28·95	
Jehanabad to Gya		2-6-79	29·22	
			58·42	
Barun-Daltonganj branch—				
Sone East Bank (Barun) to Rajhara	16-5-97	3-5-02	67·30	
Rajhara to Daltonganj		15-12-02	10·72	
			78·02	
Dighaghat branch—				
Bankipore junction to Dighaghat	30-7-84	2-4-85	5·53	
Tarighat branch—				
Dildarnagar junction to Tarighat	11-7-78	5-10-80	12·00	
Moghal Sarai-Gya branch—				
Moghal Sarai to Gya	...	1-8-00	125·48	
		1-5-02	0·94	
			126·42	
Jubbulpore branch—				
Naini junction to Jubbulpore	Feby. '63	1-8-67	223·58	
Allahabad fort branch	...	3-3-59	2·34	
Cawnpore city branch	...	15-2-79	0·88	
Agra branch—				
Tundla junction to Agra East bank	...	1-4-62	13·35	
Hathras city branch	...	1-11-98	5·58	
Branches on loop line—				
Azimganj branch—				
Nalhati to Azimganj*	...	15-7-92	27·23	
Rajmehal branch—				
Tinpahar junction to Rajmehal	...	15-12-60	7·00	
Sakrighat branch—				
Sakrigali junction to the river Ganges	...	1-1-94	1·99	
Maharajpur branch	...	30-11-98	2·48	
Sultangunge branch	22-3-93	6-5-95	1·14	
Monghyr branch—				
Jamalpur to Monghyr	...	10-4-62	5·68	
Total branches	...	...	...	729·64
TOTAL OPEN MILEAGE, EAST INDIAN RAILWAY PROPER	...	...	...	1,935·11
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Gya-Katrasgarh railway—				
Manpur to 0·87 mile beyond Gurpa (Plains section)	25-3-02			
Mile 0·87 beyond Gurpa to Kodarma (Hill section)	20-6-02	March 1906.†	25·25	
Kodarma to Hariharpur (Plateau section)	20-6-02		18·19	
			56·35	
			99·79	
Shikohabad-Farukhabad railway	13-1-98	1-3-05†	65·82	
Colliery lines—				
Tasra siding	1-11-01	...	1·75	
Chandore branch—				
Mile 170¾ from Howrah on the Jharia branch to Chandore	17-3-03	30-6-04†	4·16	
			5·91	
Ondal Sainthia Chord—				
Ondal to Sainthia	1-12-03	1-1-06†	43·62	
Total lines under construction	...	...	...	215·14
GRAND TOTAL, EAST INDIAN RAILWAY PROPER	...	...	...	2,150·25

* This line was originally on the 4′ 0″ gauge, but was converted to 5′ 6″ gauge, and incorporated with the East Indian railway from 1892.
† Probable date of opening.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads } (a) \text{ to } (d)}$ EAST INDIAN RAILWAY SYSTEM—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.
			Miles.
DOUBLE LINE—MAIN LINE AND BRANCHES—			
Howrah to Serampore	...	10-3-57	11·74
Serampore to Chandernagore	...	1-2-58	8·38
Chandernagore to Hooghly	...	1-5-58	3·11
Hooghly to Magra	...	1-10-58	5·49
Magra to Pundooah	...	25-2-59	8·32
Pundooah to Burdwan	...	1-10-59	*28·72
Burdwan to Khana	...	1-1-59	8·22
Khana to Durgapur	...	1-6-70	31·35
Durgapur to Raneegunge	...	2-9-70	14·36
Raneegunge to Sitarampur	...	19-12-70	16·85
Sitarampur to Luckeeserai	...	1-1-71	124·64
Luckeeserai to Burhee	...	22-6-60	9·52
Burhee to Barh	...	22-2-68	27·10
Barh to Futwah	...	11-1-68	25·37
Futwah to Dinapore	...	20-3-67	19·63
Dinapore to Bihta	...	13-3-68	10·93
Bihta to Arrah	...	28-3-70	13·50
Arrah to Buxar	...	13-3-68	42·67
Buxar to Dildarnagar	...	15-4-82	22·46
Dildarnagar to Zamania	...	20-5-82	3·59
Zamania to Sakaldiha	...	20-9-82	16·28
Sakaldiha to Moghal Sarai	...	10-8-82	11·49
Hooghly bridge branch	...	15-3-87	4·22
Sitarampur to Barakar	...	6-3-01	8·39
Ghaziabad to Shahadara	20-10-99	20-2-02	8·13
Shahadara to east side of Jumna bridge near Delhi		1-7-02	2·57
TOTAL DOUBLE LINE	...	...	493·33

Details of construction—

Permanent-way.—The main line is laid with wooden and cast iron plate sleepers. The rails vary in weight from 74 lb. to 85 lb. to the yard. On the Ondal Loop, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Jharia branch, the rails are iron and steel and are laid on timber and cast iron plate sleepers. On the Giridih branch, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Patna-Gya branch, the first 29 miles are laid with 64 lb. rails. On the Moghal Sarai-Gya branch, double-headed 75 lb. rails are laid with cast iron chairs and timber sleepers. The Jubbulpore branch is laid with 75 lb. steel rails on timber and cast iron plate sleepers. The Azimganj branch is laid with 82 lb. rails on cast iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Tunnels.—See Appendix 37.

Bridges.—See Appendix 36.

Fencing.—The line is double fenced throughout, excepting the Azimganj branch, and the Barakar-Katrasgarh section of the Jharia branch, which are unfenced, and also the Moghal Sarai-Gya branch which is fenced near villages, round station yards and for a short distance near each level crossing only.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient of the main line is 1 in 300 except between Raneegunge and Luckeesarai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha. The ruling gradient of the Loop line and the Jubbulpore branch is 1 in 200; of the Moghal Sarai-Gya branch, 1 in 400; of the Patna-Gya branch, 1 in 250; of the Jharia branch, 1 in 140; of the Azimganj branch, 1 in 100; and of the Ondal Loop and Kurhurbaree branches, 1 in 80.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Bankipore junction to the right bank of the Ganges at Digha Ghat); Jharia (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Kharabad, Nundi to Panuria and Salanpur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital.

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deferred portion, *i.e.*, one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

* Of this, 220 miles (Boinchee to Debipur) are laid with a third track.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads } (a) \text{ to } (d)}$ **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Terms of contracts—*concld.*

Terms of contracts.—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

	£
Company's stock at date of purchase ...	26,200,000
Premium of 25 per cent.	6,550,000
	32,750,000

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

NOTE.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

Power of Company to surrender contract.—See currency of contracts.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of fourteen-fifteenths to Government and one-fifteenth to the Company.

Rates and fares.—Certain maxima and minima rates and fares have been fixed within which the Company are permitted to vary rates.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879*	34,32,77,360	4,35,46,730	2,86,14,479	8·34	1,65,74,363	...	61,25,877	+ 59,14,239
1880	34,35,77,327	4,35,04,947	2,86,72,035	8·35	†1,98,06,263	...	17,72,690	+ 70,93,082
1881	34,87,63,677	4,54,11,472	3,08,35,036	8·84	31,05,426	1,73,92,000	20,63,867	+ 82,73,743
1882	35,07,21,455	4,71,17,594	2,96,57,086	8·46	32,81,764	1,73,92,000	17,88,073	+ 71,95,249
1883	35,24,91,304	4,94,67,085	3,11,50,980	8·84	38,16,170	1,72,57,772	19,99,731	+ 80,77,307
1884	35,57,38,760	4,88,38,714	2,78,22,003	7·68	35,58,085	1,78,50,459	11,72,323	+ 47,41,188
1885	35,85,96,619	4,63,86,889	3,30,16,960	9·21	38,13,262	1,79,75,714	16,29,502	+ 95,98,482
1886	36,06,85,918	4,66,70,853	3,05,13,359	8·46	39,91,104	1,89,50,137	14,97,276	+ 60,74,842
1887	36,12,14,681	4,60,65,661	3,13,34,263	8·67	40,70,944	1,92,13,333	15,87,252	+ 64,62,734
1888	36,09,27,530	4,54,36,902	3,03,35,075	8·40	40,73,297	2,03,43,530	11,64,693	+ 47,53,555
1889	36,19,22,300	4,49,57,901	2,94,05,230	8·12	41,84,103	2,09,60,000	8,31,347	+ 34,28,775
1890	36,21,22,758	4,40,57,665	2,98,26,815	8·24	41,83,278	2,03,43,530	10,37,019	+ 42,62,988
1891	36,15,18,827	4,56,87,001	3,60,37,028	9·97	43,93,426	1,86,94,054	26,45,392	+ 1,03,04,156
1892	36,24,97,506	4,91,41,600	3,48,16,719	9·60	37,25,754	2,06,47,164	20,88,760	+ 83,55,041
1893	36,91,20,357	5,08,44,654	3,60,94,293	9·78	41,26,889	2,34,46,780	17,04,125	+ 68,16,499
1894	37,24,36,356	5,26,89,485	3,64,26,405	9·78	43,37,988	2,43,89,582	15,39,767	+ 61,59,068
1895	37,82,18,020	5,41,50,856	3,78,34,726	10·00	45,73,681	2,61,01,122	14,29,078	+ 57,30,815
1896	38,27,66,003	5,40,69,142	3,67,77,682	9·61	46,90,562	2,58,59,455	12,45,733	+ 49,81,932
1897	39,39,91,173	5,88,28,013	4,14,93,469	10·53	48,20,238	2,47,84,406	23,87,763	+ 95,51,062
1898	40,71,94,336	5,97,96,060	4,08,07,269	10·02	50,46,514	2,52,64,533	24,99,244	+ 99,96,978
1899	42,70,40,208	6,35,45,974	4,26,60,018	9·99	54,64,902	2,21,45,516	30,09,920	+ 1,20,39,680
1900	44,28,43,540	6,84,74,972	4,47,15,571	10·10	60,18,054	2,15,60,963	18,09,104	+ 1,53,27,450
1901	45,66,59,069	7,03,96,636	4,57,13,311	10·01	65,46,878	2,16,82,360	18,51,450	+ 1,56,32,623
1902	47,06,40,852	6,77,38,713	4,29,80,833	9·13	70,34,492	2,16,46,868	16,19,965	+ 1,26,79,508
1903	48,79,61,454	6,99,72,699	4,63,98,122	9·52	74,46,371	2,16,15,000	16,82,231	+ 1,56,54,820

* Worked by the East Indian Guaranteed Railway Company.

† Including annuity charges, which cannot be separated from interest charges.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 5 / Sub-heads (*a*) to (*d*) **EAST INDIAN RAILWAY SYSTEM—*contd.***

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	East Indian (5′ 6″ gauge).		Patna-Gya (5′ 6″ gauge).		Nalhati (4′ 0″ gauge). *		Dildarnagar Ghazipur (5′ 6″ gauge).		Calendar year.	East Indian (5′ 6″ gauge).		Patna-Gya (5′ 6″ gauge).		Nalhati (4′ 0″ gauge). *		Dildarnagar Ghazipur. (5′ 6″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week	Pro: of exp: to earnings.		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.			Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	1878	507	35·69	...	...	64	79·41	...	...
1854	131	62·18	...	...	...	...	...	...	1879	552	32·86	121	55·84	65	67·56	...	...
1855	108	51·97	...	...	...	...	...	...	1880	549	33·04	162	56·13	49	105·33	56	128·33
1856	167	40·62	...	...	...	...	...	...	1881	578	31·85	173	65·41	47	79·20	63	99·52
1857	232	38·12	...	...	...	...	...	...	1882	601	36·94	184	60·51	51	73·05	73	85·24
1858	279	46·49	...	...	...	...	...	...	1883	630	36·95	158	51·93	57	69·63	80	49·87
1859	253	44·77	...	...	...	...	...	...	1884	558	37·61	174	57·48	55	90·84	75	58·32
1860	231	48·36	...	...	...	...	...	...	1885	539	35·25	174	52·52	54	82·08	75	52·28
1861	240	46·49	...	...	...	...	...	...	1886	591	34·59	180	52·01	59	85·29	78	52·05
1862	192	58·81	...	...	...	...	...	...	1887	568	31·70	178	46·58	65	70·57	77	46·45
1863	222	55·01	...	...	...	...	...	...	1888	567	33·24	168	47·97	74	78·39	74	91·13
1864	253	50·79	...	...	36	48·88	...	...	1889	557	34·59	175	48·70	73	78·16	...	...
1865	311	44·82	...	...	41	63·28	...	...	1890	538	31·35	174	45·80	71	78·01	...	...
1866	374	44·24	...	...	36	105·15	...	...	1891	615	27·21	204	42·76	66	62·97	...	...
1867	369	48·91	...	...	45	68·81	...	...	1892	587	28·47	193	42·94	...	...	...	...
1868	346	44·88	...	...	57	83·60	...	...	1893	584	27·44	...	...	...	...	...	...
1869	390	44·42	...	...	60	59·64	...	...	1894	604	30·87	...	...	...	...	...	...
1870	424	43·68	...	...	60	48·77	...	...	1895	603	31·07	...	...	...	...	...	...
1871	333	43·36	...	...	55	58·07	...	...	1896	597	31·98	...	...	...	...	...	...
1872	368	41·44	...	...	53	57·14	...	...	1897	649	29·47	...	...	...	...	...	...
1873	382	38·75	...	...	60	60·06	...	...	1898	658	31·76	...	...	...	...	...	...
1874	474	35·70	...	...	61	67·22	...	...	1899	697	32·84	...	...	...	...	...	...
1875	374	39·58	...	...	57	76·42	...	...	1900	708	34·78	...	...	...	...	...	...
1876	452	35·08	...	...	54	111·15	...	...	1901	733	35·06	...	...	...	...	...	...
1877	565	31·35	...	...	64	100·47	...	...	1902	687	36·55	...	...	...	...	...	...
									1903	692	33·64						

5 (*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of opening.	Mileage.	Total.
		Miles.	Miles.
Delhi to Kalka	1-3-91	162·36	162·36

Details of construction—

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lb. to the yard, laid on cast iron plate and wooden sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is double fenced throughout.

Curves.—There are no curves of less than 1,000 feet radius.

Gradient.—The ruling gradient is 1 in 200 except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.

12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent. of gross earnings previously retained by Government.

* Converted to 5′ 6″ gauge and incorporated with the East Indian railway.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$ **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3¼ per cent. on share capital.

The general conditions of the contracts are as follows:—

Government aid.—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3¼ per cent. per annum on their share capital. Land was also provided free of cost.

Currency of contracts.—The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts.—Nil.

Terms of working.—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent. to the Company. Surplus profits in excess of 3¼ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

Rates and fares.—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts	Percentage on capital outlay.	Subsidy from Government.	Total Income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1889	58,90,335	...	...	...	...	...	...	...	...
1890	1,35,55,580	...	...	...	...	...	...	...	...
1891	1,55,44,692	9,07,697	4,72,002	3·04	...	4,72,002	3·04	128	48·00
1892	1,58,22,137	10,81,769	5,62,520	3·56	...	5,62,520	3·56	129	48·00
1893	1,55,24,600	11,98,508	6,23,224	4·01	...	6,23,224	4·01	143	48·00
1894	1,55,25,547	31,37,526	6,95,514	4·48	...	6,95,514	4·48	159	48·00
1895	1,55,06,120	14,60,519	7,59,470	4·90	...	7,59,470	4·90	174	48·00
1896	1,54,49,783	13,18,840	6,85,797	4·44	...	6,85,797	4·44	158	48 00
1897	1,53,26,585	15,73,319	8,18,126	5·34	...	8,18,126	5·34	186	48·00
1898	1,53,43,587	16,07,512	8,35,906	5·45	...	8,35,906	5·45	191	48·00
1899	1,53,01,272	14,49,378	7,29,541	4·77	...	7,29,541	4·77	172	48·00
1900	1,53,15,467	13,72,523	7,13,712	4·66	...	7,13,712	4·66	163	48·00
1901	1,52,92,648	18,05,858	9,39,046	6·14	...	9,39,046	6·14	213	48·00
1902	1,54,23,791	18,66,695	9,70,681	6·29	...	9,70,681	6·28	221	48·00
1903	1,55,49,998	18,30,960	9,52,099	6·12	...	9,52,099	6·12	216	48·00

5 (*c*) South Behar railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of opening.	Mileage.	Total.
		Miles.	Miles.
Luckeeserai to Gya	5-7-99	78·76	78 76

Details of construction—

Permanent-way.—The permanent-way is of the East Indian railway standard design with double headed rails 75 lb. to the yard, laid half with cast iron chairs and timber sleepers and half with cast iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Bridges.—See appendix 86.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$ **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*c*) South Behar railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Fencing.—The line is fenced near villages, round station yards and for a short distance near each level crossing only.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land was also provided free of cost.

Currency of contracts.—Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

Rates and fares.—To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

Statistics of working—

Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Rebate from E. I. Ry.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	5,17,988	...	...	...	...	...	...	...	...
1896	30,88,036	...	...	...	...	...	...	...	...
1897	62,72,345	...	...	...	...	...	...	...	...
1898	97,45,791	...	...	...	...	...	...	...	...
1899	1,18,16,730	2,03,328	1,32,163	1·12	33,403	1,65,566	1·40	101	35·00
1900	1,23,15,110	4,67,183	3,03,636	2·47	1,44,404	4,48,040	3·64	114	35·00
1901	1,23,66,533	5,14,870	3,08,822	2·50	1,28,082	4,36,904	3·53	125	40·02
1902	1,19,88,612	4,99,809	2,74,895	2·29	1,65,445	4,40,340	3·42	122	45·00
1903	1,20,01,897	5,24,605	2,88,533	2·40	1,57,708	4,46,241	3·72	128	45·00

5 (*d*) Tarkessur railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Seoraphuli to Tarkessur	20-2-83	1-1-85	22·23	22·23

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. rails and fastenings of wrought iron purchased from the East Indian railway, laid on cast iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is double fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 500.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$ **EAST INDIAN RAILWAY SYSTEM**—*concld.*

5 (*d*) Tarkessur railway (5′ 6″ gauge)—*concld.*

Terms of contracts—

The railway is worked under the following contract:—

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.
15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.
1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Land was provided free of cost.

Currency of contracts.—The contract of 1883 terminates on the 7th September 1982, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

Power of Company to surrender contracts.—Nil.

Terms of working.—From the gross earnings are deducted working expenses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole; 5 per cent. of the gross earnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided in proportion of four-fifths to the Tarakessur Railway Company and one-fifth to the East Indian Railway Company.

Rates and fares.—Certain maxima have been fixed, and the Company are authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.

Statistics of working—

Calendar year.	Table I: Capital outlay to end of each year.	Table I: Gross earnings.	Table I: Net traffic receipts.	Table I: Per cent. on Capital outlay.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1885	16,88,995	2,62,313	1,24,424	7·37	227	52·57
1886	17,24,717	2,49,003	1,19,136	6·91	215	52·15
1887	17,28,410	2,63,792	1,32,274	7·65	228	49·86
1888	17,34,822	2,79,717	1,36,780	7·88	242	51·10
1889	17,28,138	2,84,895	1,36,578	7·90	246	55·51
1890	17,28,778	2,86,526	1,44,283	8·35	248	49·64
1891	17,29,021	3,05,132	1,63,478	9·45	264	46·42
1892	17,32,567	2,93,674	1,54,837	8·94	254	47·28
1893	17,47,280	2,88,051	1,50,420	8·61	245	46·86
1894	17,47,840	3,06,159	1,56,469	8·95	265	48·96
1895	17,53,340	3,08,156	1,59,091	9·07	267	48·37
1896	17,56,898	3,13,243	1,57,005	8·95	271	49·88
1897	17,57,160	3,12,656	1,62,563	9·25	270	48·01
1898	17,77,085	3,14,056	1,58,461	8·92	272	49·54
1899	17,84,166	3,08,759	1,52,491	8·55	267	50·58
1900	17,84,166	3,32,965	1,61,132	9·03	288	51·61
1901	17,92,293	3,30,390	1,57,828	8·81	285	52·23
1902	17,91,612	3,28,510	1,53,348	8·56	283	53·32
1903	17,93,985	3,33,924	1,62,741	9·13	288	50·96

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$ **GREAT INDIAN PENINSULA RAILWAY SYSTEM—**

Lines comprising system.—The Great Indian Peninsula railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total Miles.
(*a*) Great Indian Peninsula railway	(5′ 6″ gauge)	1,561·63	...	1,561·63
(*b*) Bhopal-Itarsi railway	(5′ 6″ gauge)	57·39	...	57·39
(*c*) Bhopal-Ujjain railway	(5′ 6″ gauge)	113·27	...	113·27
(*d*) Bina-Goona-Baran railway	(5′ 6″ gauge)	145·63	...	145·63
(*e*) Indian Midland railway	(5′ 6″ gauge)	805·03	...	805·03
(*f*) Gwalior Light railway	(2′ 0″ gauge)	126·14	57·86	184·00
(*g*) *Agra-Delhi Chord railway*	(5′ 6″ gauge)	...	120·10	120·10
	Total	2,809·09	177·96	2,987·05

Running powers—

Home line over Foreign lines:—

Dadar junction to Colaba, Bombay, Baroda and Central India railway	7·25
At Agra, Rajputana-Malwa railway	2·89
Agra to Tundla, East Indian railway	12·75
At Cawnpore " " "	1·49
At Manikpore " " "	0·63
At Katni " " "	0·38
At Katni, Bengal-Nagpur railway	1·60
At Ujjain, Bombay, Baroda and Central India railway	0·24
At Cawnpore, Oudh and Rohilkhand State railway	0·86
From Cawnpore to Lucknow, Oudh and Rohilkhand State railway	44·63
Total	72·72

Foreign lines over Home line:—

Bombay, Baroda and Central India railway, Dadar Junction to Carnac bridge	4·39
Bengal-Nagpur railway at Nagpur	0·65
Total	5·04

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 6 / Sub-heads (*a*) to (*g*)* **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage.
			Miles.	Miles.		Miles.
NORTH-EAST LINE—						
Main line—						
Victoria terminus to Bori Bandar	31-10-50	1-1-82	0·19		1853	20
Bori Bandar to Thana		18-4-53	20·54		1854	33
Thana to Kalyan { Thana to Persick	28-3-51	1-5-54	12·65		1855	49
Thana to Kalyan { Persick to Kalyan	22-5-52					
Kalyan to Vasind	20-5-53	1-10-55	16·14		1856	37
Vasind to Asangaon		6-2-60	8·75		1857	87
Asangaon to Kasara		1-1-61	21·84		1858	193
Kasara to Igatpuri (Thull Ghat)		1-1-65	9·89		1859	244
Igatpuri to Nasik	25-3-57	28-1-61	31·43		1860	297
Nasik to Chalisgaon		1-10-61	87·24		1861	438
Chalisgaon to Jalgaon		6-10-62	57·48		1862	495
Jalgaon to Bhusaval		20-5-63	15·01		1863	555
Bhusaval to Burhanpur		20-11-65	33·91		1864	587
Burhanpur to Khandwa		3-9-66	42·78		1865	704
Khandwa to Bir	1858	17-2-68	21·15		1866	813
Bir to Itarsi		1-1-70	89·27		1867	854
Itarsi to Sohagpur		1-2-70	30·69		1868	875
Sohagpur to Jubbulpore		8-3-70	121·14		1869	875
Total main line	...	...	...	615·10		
Branches—					1870	1,268
Chalisgaon-Dhulia branch—					1871	1,290
Chalisgaon to Dhulia	15-7-97	15-10-00	34·95		1872	1,290
Jalgaon-Amalner branch—					1873	1,290
Jalgaon to Dharangaon	Jany. '98	20-2-00	18·26		1874	1,308
Dharangaon to Amalner		4-4-00	16·00		1875	1,308
			34·26			
Nagpur branch—						
Bhusaval-Junction to Malkapur		20-5-63	30·05		1876	1,308
Malkapur to Shegaon		24-10-64	32·53		1877	1,336
Shegaon to Badnera		18-12-65	72·67		1878	1,482
Badnera to Pulgaon	27-9-58	16-7-66	40·29		1879	1,493
Pulgaon to Sindi		5-11-66	38·27		1880	1,493
Sindi to Nagpur		20-2-67	29·44		1881	1,493
			243·25		1882	1,493
					1883	1,493
Khamgaon branch—					1884	1,493
Jalamb to Khamgaon	7-6-69	4-3-70	7·97			
Amraoti branch—						
Badnera to Amraoti	11-6-70	16-2-71	5·49			
Wardha Coal branch—						
Wardha to mile 490·20	5-2-72	1-2-79	18·95		1885	1,493
Mile 490·20 to mile 512·64	1-4-74	*24-12-75	22·44		1886	1,493
Mile 512·64 to Warora		†26-1-76	4·00		1887	1,492
			45·39			
Mohpani branch—						
Gadarvada to Mohpani	13-2-71	18-9-72	12·47		1888	1,493
Mohpani to Gotitoria	25-2-96	2-11-96	1·07		1889	1,492
Mohpani to new coal-fields	12-3-96	3-6-00	6·14		1890	1,492
			13·68		1891	1,491
Total branches	...	...	...	384·99	1892	1,490
TOTAL NORTH-EAST LINE	...	...	...	1,000·09	1893	1,490
SOUTH-EAST LINE—						
Main line—						
Kalyan to Palasdhari (Karjat). { Kalyan to Neral	13-5-54	12-5-56	30·61		1894	1,490
Kalyan to Palasdhari (Karjat). { Neral to Palasdhari	10-1-55					
Palasdhari to Khandala (Bhore ghat)		14-5-58	13·29		1895	1,490
Khandala to Lonavla (Bhore ghat)	7-7-55	14-6-58	2·35		1896	1,491
Lonavla to Poona		14-6-58	39·66		1897	1,491
Poona to Diksal		15-12-58	64·25		1898	1,491
Diksal to Barsi Junction		23-10-59	50·60		1899	1,491
Barsi Junction to Mohol	5-10-55	21-1-60	28·32		1900	1,562
Mohol to Sholapur		6-6-60	20·51		1901	1,561
Sholapur to Gulbarga	8-8-65	1-2-70	70·29		1902	1,561
Gulbarga to the Kistna	Dec. '65	1-12-70	73·76		1903	1,561
Kistna to Raichur		1-5-71	15·31			
Total main line	...	...	...	408·86		
Branches—						
Dhond-Manmad branch—						
Dhond to Ahmednagar	25-8-77	15-3-78	50·41			
Ahmednagar to Manmad		17-4-78	95·03			
			145·44			
Khopoli branch—						
Palasdhari to Khopoli	30-1-55	12-5-56	7·24			
Total branches	...	...	...	152·68		
TOTAL, SOUTH-EAST LINE	...	...	...	561·54		
TOTAL OPEN MILEAGE, GREAT INDIAN PENINSULA RAILWAY PROPER	...	...	...	1,561·63		

* For coal traffic only; subsequently opened for public traffic as follows: mile 489·69 to mile 492·25 on 16th June 1887 and mile 492·25 to Warora on 7th November 1877.

† For coal traffic only; opened for public traffic on 1st January 1881.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 6 / Sub-heads (*a*) to (*g*) **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.
			Miles.
DOUBLE LINE—MAIN LINE AND BRANCHES—			
NORTH-EAST LINE—			
Victoria terminus to Bori Bandar	...	1-1-82	0·19
Bori Bandar to Thana	...	18-4-53	20·54
Thana to Kalyan	...	1-5-54	12·65
Kalyan to Vasind	...	22-10-66	16·15
Vasind to Atgaon	...	20-2-67	9·65
Atgaon to Kasara	...	25-4-67	15·94
Kasara to Igatpuri	...	1-1-65	9·89
Igatpuri to Nasik	...	10-1-69	31·43
Nasik to Chalisgaon	...	10-1-69	87·24
Chalisgaon to Kajgaon	...	10-1-69	11·86
Kajgaon to Pachora	...	17-3-69	16·05
Pachora to Maheji	...	27-5-69	9·14
Maheji to Bhadli	...	6-3-73	27·59
Bhadli to Bhusaval	...	6-6-73	7·84
Bhusaval to Bhusaval Junction	...	1-7-92	1·11
Bhusaval Junction to Khandwa (Abna Junction)	...	11-1-89	75·12
Bagra tunnel to Towa viaduct	...	1-2-70	0·74
Total North-East line	...	...	353·13
SOUTH-EAST LINE—			
Kalyan to Palasdhari	...	25-7-70	30·61
Palasdhari to Khandala } Bhore ghat	...	14-5-63	13·20
Khandala to Lonavla } Bhore ghat	...	14-6-58	2·61
Total South-East line	...	...	46·42
NAGPUR BRANCH—			
Bhusaval Junction to Nadgaon	...	11-1-89	17·72
Nadgaon to Shegaon	...	1-4-90	44·65
Total Nagpur branch	...	...	62·37
TOTAL DOUBLE LINE			461·92

Details of construction—

Permanent-way.—The rails originally laid were iron, weighing 68 lb. and 84 lb. to the yard. These have now been replaced by steel rails; there were 63·79 miles of 86 lb., 1,083·60 miles of 82 lb. and 581·75 miles of 69 lb. on the 30th June 1903 on the main line only. The sleepers originally laid were chiefly wooden. These have now mostly been replaced by iron pots; there were 1,677·37 miles of bowl sleepers and 51·77 miles of wooden sleepers on the 30th June 1903 on the main line only. The whole of the South-East line, excepting the Ghat section, is laid with iron pots. On the Dhond-Manmad line, the rails are chiefly double headed steel, 69 lb. to the yard, laid on iron pot sleepers. On the Wardha Coal railway, there are 18·13 miles of 69 lb. double headed steel rails and 27·27 miles of 68 lb. iron rails. The sleepers are of wood for 38·60 miles and cast iron pot sleepers for 6·80 miles. On the Khamgaon branch, the line was originally laid with 57 lb. flat-footed rails on cast iron pots, but in 1895 the whole of these were removed and replaced by second hand Great Indian Peninsula railway 68 lb. iron rails and cast-iron pot sleepers. There is only 0·18 mile of road at Jalamb which is laid with 82 lb. steel rails. On the Amraoti branch with the exception of 0·50 mile at the Badnera end, which is laid with steel rails, the permanent-way is of iron, the rails weighing 68 lb. to the yard, on cast iron pot sleepers.

Ballast.—The line is fully ballasted throughout.

Tunnels.—See Appendix 37.

Bridges.—See Appendix 36.

Fencing.—The line, with the exception of the Mohpani, Chalisgaon, Dhulia and Jalgaon-Amalner branches, is well fenced throughout. About 1·26 miles of wire fencing have been provided at each end of the Khamgaon branch, the remaining portion being unfenced. The Amraoti branch is fenced only at the Badnera and Amraoti ends.

Curves.—The sharpest curve has a radius of 990 feet; it is 0·34 mile long and is situated between miles 75 and 76 from Bombay.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200 with 1 in 100 banking sections near Wasind and Asvali; on the Ghat sections it is 1 in 37; Dhond and Manmad branch, 1 in 100 except between Puntamba and Yeola where it is about 1 in 200; Wardha Coal branch, 1 in 133; Chalisgaon-Dhulia branch, 1 in 125; Jalgaon-Amalner branch, 1 in 200; Mohpani branch, 1 in 150 and 1 in 100 on the branch to the new coal-fields; Khamgaon branch, 1 in 100; and Amraoti branch, 1 in 163.

Terms of contract—

The railway is worked under the following contract:—

Contract of—21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows:—

Government aid:—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company which is at present authorised at £2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum or at such other rate as may be agreed upon; or will be raised by the Company by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was also provided free; but any acquired after 30th June 1900, is paid for from the capital of the undertaking.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Terms of contract—*concld.*

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40,781,568, * payable up to the 17th August 1948, in the form of a terminable annuity of £ 1,268,516.

	£
*Company's stock at date of purchase	34,859,218
Debentures and debenture stock	5,922,350
Total	40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company for all debts and liabilities incurred under sanction.

Power of Company to surrender contract—Nil.

Terms of working.—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(*i*) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(*ii*) A sum of Rs. 1,00,00,000 which is payable to Government;

(*iii*) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, $\frac{19}{20}$ths of the surplus are paid to the Secretary of State and $\frac{1}{20}$th to the Company. Provided that if the Company increases their new capital and issue further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{20}$th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on Capital outlay.	Guaranteed interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	25,59,56,152	2,52,48,315	1,01,90,602	3·98	1,24,65,646	...	6,14,291	−23,89,935
1880	25,58,96,113	2,49,53,253	1,11,05,551	4·34	1,24,93,200	...	5,53,336	−19,41,485
1881	25,75,86,095	3,20,56,823	1,61,74,097	6·28	1,24,93,200	...	18,23,748	+18,57,149
1882	25,75,90,499	3,53,63,201	1,80,88,488	7·02	1,24,23,200	...	32,05,888	+23,89,400
1883	26,07,58,700	3,51,14,365	1,75,36,005	6·72	1,25,12,825	...	33,22,918	+17,00,262
1884	26,34,97,600	3,36,56,544	1,59,55,250	6·06	1,42,81,503	...	24,76,048	−8,02,301
1885	26,84,43,316	3,64,32,047	1,79,31,897	6·68	1,51,17,467	...	26,97,344	+1,16,586
1886	26,92,99,673	3,92,57,907	2,08,78,390	7·75	1,60,91,138	...	39,89,569	+7,97,683
1887	27,03,76,543	3,99,27,468	2,10,80,237	7·80	1,66,44,568	...	41,03,068	+3,32,601
1888	27,25,93,364	4,10,59,219	2,16,35,667	7·94	1,72,81,176	...	43,31,246	+23,245
1889	27,50,39,981	3,70,63,814	1,78,91,616	6·51	1,74,32,160	...	26,82,255	−22,22,799
1890	27,77,29,064	3,81,45,242	1,90,22,952	6·85	1,55,23,271	...	31,04,971	+3,94,710
1891	27,75,19,781	4,52,55,333	2,32,50,708	8·38	1,67,57,262	...	51,39,008	+13,04,438
1892	27,72,17,255	4,03,65,627	2,01,95,097	7·28	1,88,04,314	...	38,18,506	−24,22,723
1893	27,72,93,360	3,38,13,742	1,79,90,922	6·49	1,91,65,618	...	29,25,476	−41,00,172
1894	27,91,09,112	3,62,74,296	1,62,42,786	5·82	2,18,32,651	...	30,40,331	−86,30,196

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	
1853	119	45·90
1854	88	60·81
1855	89	70·21
1856	113	42·17
1857	158	45·27
1858	173	42·19
1859	172	51·19
1860	144	60·97
1861	139	76·35
1862	149	62·02
1863	175	67·55
1864	119	72·07
1865	414	59·54
1866	357	58·07
1867	368	55·69
1868	357	61·80
1869	348	67·79
1870	300	62·25
1871	307	63·03
1872	284	64·25
1873	284	64·09
1874	303	59·17
1875	324	47·28
1876	369	47·60
1877	492	48·30
1878	429	48·91
1879	383	59·64
1880	372	55·49
1881	426	49·40
1882	470	48·00
1883	466	48·67
1884	502	52·31
1885	467	50·46
1886	503	46·49
1887	511	46·84
1888	526	46·96

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads } (a) \text{ to } (g)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Statistics of working—*concld.*

TABLE I—*concld.*

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on Capital outlay.	Guaranteed interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1895 . .	27,95,39,235	3,37,90,194	1,47,16,901	5·26	2,16,97,060	...	16,20,361	—86,00,520
1896 . .	27,90,29,173	3,44,19,629	1,54,05,060	5·52	2,02,18,872	...	21,53,257	—69,67,069
1897 . .	27,92,85,611	2,84,32,402	93,83,654	3·36	1,89,46,479	...	...	—95,62,825
1898 . .	28,18,37,621	3,48,77,496	1,41,02,053	5·00	1,83,20,513	...	13,57,327	—55,75,787
1899 . .	28,55,49,756	3,58,09,431	1,56,57,520	5·48	1,79,65,944	...	17,77,032	—40,85,456
			95,37,130†	3·15	89,65,500†		14,48,293†	—8,76,573†
1900 . .	*30,27,49,717	3,46,31,925	56,30,063‡	2·19	24,34,267‡	94,88,889		—52,38,078‡
1901 . .	30,38,67,135	4,16,57,453	2,16,48,151	7·12	48,96,908	1,90,87,970	2,72,210	—26,08,937
1902 . .	§30,57,71,991	‖4,23,12,668	‖2,10,73,893	6·89	‖49,41,692	1,90,56,735	2,92,872	—32,17,456
1903 . .	31,08,53,055	4,68,61,534	2,38,12,514	7·66	50,66,786	1,90,28,730	3,26,878	—6,09,880

TABLE II—*concld.*

Calendar year.	Earnings per mile per week.	Prop: of exp: to earnings.
	Rs.	
1889 . .	494	51·42
1890 . .	508	49·86
1891 . .	584	48·25
1892 . .	525	49·93
1893 . .	501	53·57
1894 . .	468	55·18
1895 . .	436	56·38
1896 . .	444	55·20
1897 . .	367	66·96
1898 . .	450	59·49
1899 . .	462	55·76
1900 . .	439	52·49
1901 . .	518	48·03
1902 . .	523	50·18
1903 . .	575	49·18

WARDHA COAL BRANCH.

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.
1879 . .	55,99,772	1,65,158	6,073	0·11	2,51,434	—2,45,361
1880 . .	57,92,921	3,02,879	—1,31,730	...	2,57,032	—3,88,762
1881 . .	58,80,993	4,75,988	1,19,447	2·03	2,37,916	—1,18,469
1882 . .	60,94,186	5,95,622	98,287	1·61	2,38,834	—1,40,547
1883 . .	63,93,758	7,64,702	5,89,382	9·22	2,47,602	+3,41,780
1884 . .	66,20,641	6,81,037	2,11,860	3·20	2,61,176	—49,316
1885 . .	66,65,755	6,53,649	1,46,395	2·20	2,64,219	—1,17,924
1886 . .	71,93,093	7,28,205	1,35,986	1·89	2,78,228	—1,42,292
1887 . .	71,00,635	7,68,052	1,31,981	1·86	2,89,465	—1,57,484
1888 . .	70,91,230	8,71,430	1,98,020	2·79	2,84,523	—86,503
1889 . .	70,54,755	8,62,694	2,99,621	4·25	2,82,844	+16,777
1890 . .	70,06,181	9,33,326	2,75,001	3·93	2,81,296	—6,295
1891 . .	49,31,196	2,58,971	60,053	1·21	2,03,779	—1,43,726
1892 . .	49,37,689	2,32,986	34,096	0·68	1,99,337	—1,65,241
1893 . .	49,37,689	2,10,356	89,213	1·79	1,99,484	—1,10,271
1894 . .	49,37,689	2,20,227	89,289	1·79	1,99,508	—1,10,219
1895 . .	49,90,794	1,98,552	76,362	1·53	1,99,539	—1,23,177
1896 . .	49,96,305	2,06,078	83,859	1·68	1,99,745	—1,15,886
1897 . .	49,96,325	1,96,858	58,531	1·17	1,99,794	—1,41,263
1898 . .	49,96,325	2,09,600	77,827	1·56	1,99,853	—1,22,026
1899 . .	49,96,325	2,07,216	82,500	1·65	1,99,852	—1,17,352
1900 . .	**	1,75,380	††80,754	...	††99,927	††—19,173
1901 . .	Amalgamated with the Great Indian Peninsula railway.					

TABLE II.

Calendar year.	Earnings per mile per week.	Prop: of exp: to earnings.
	Rs.	
1879 . .	62	105·92
1880 . .	91	87·31
1881 . .	**	**
1882 . .	**	**
1883 . .	109	76·65
1884 . .	116	76·77
1885 . .	§§	§§
1886 . .	...	...
1887 . .	...	...
1888 . .	...	...
1889 . .	...	...
1890 . .	...	...
1891 . .	...	...
1892 . .	...	...
1893 . .	...	...
1894 . .	...	...
1895 . .	...	...
1896 . .	...	...
1897 . .	...	...
1898 . .	...	...
1899 . .	...	...
1900 . .	...	...
1901 . .	Amalgamated with the Great Indian Peninsula railway.	

DHOND-MANMAD BRANCH.

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.
1879 . .	98,90,308	4,67,557	—27,664	...	4,07,525	—4,35,189
1880 . .	1,07,29,227	6,95,094	65,145	0·61	4,76,299	—4,11,154
1881 . .	99,49,346	6,33,862	1,22,588	1·23	3,93,438	—2,70,850
1882 . .	99,25,416	7,39,558	1,59,192	1·60	3,97,802	—2,38,610
1883 . .	1,00,64,757	8,22,833	1,92,139	1·91	4,02,585	—2,10,446
1884 . .	1,02,49,438	8,77,100	2,03,785	1·99	4,08,283	—2,04,498
1885 . .	1,02,63,278	9,07,422	2,20,623	2·15	4,10,544	—1,89,921
1886 . .	1,09,26,745	9,84,718	2,33,764	2·14	4,30,353	—1,96,589
1887 . .	1,09,46,935	9,60,890	2,27,338	2·08	4,37,893	—2,10,555
1888 . .	1,09,75,115	10,31,762	2,55,445	2·33	4,33,458	—1,83,013
1889 . .	1,09,83,830	10,08,616	2,49,427	2·27	4,39,319	—1,89,892
1890 . .	1,09,93,448	10,61,316	2,63,134	2·39	4,39,629	—1,76,495
1891 . .	1,10,44,039	11,90,340	3,08,583	2·79	4,40,296	—1,31,713
1892 . .	1,10,73,028	12,18,412	3,28,335	2·96	4,42,535	—1,14,200
1893 . .	1,11,37,125	12,90,798	3,46,572	3·13	4,44,246	—95,674
1894 . .	1,12,11,642	13,61,866	3,81,993	3·41	4,48,018	—66,025
1895 . .	1,13,18,247	14,04,021	4,08,233	3·61	4,50,104	—41,871
1896 . .	1,13,73,050	13,11,585	3,67,395	3·23	4,55,018	—87,623
1897 . .	1,14,06,534	12,01,143	2,81,272	2·47	4,56,230	—1,74,958
1898 . .	1,14,23,076	11,18,296	2,89,536	2·53	4,56,411	—1,66,875
1899 . .	1,15,34,107	11,55,082	2,99,555	2·60	4,59,296	—1,59,741
1900 . .	**	7,25,613	†† 2,11,534	...	†† 2,30,220	††—18,686
1901 . .	Amalgamated with the Great Indian Peninsula railway.					

TABLE II.

Calendar year.	Earnings per mile per week.	Prop: of exp: to earnings.
	Rs.	
1879 . .	62	105·92
1880 . .	91	87·31
1881 . .	**	**
1882 . .	**	**
1883 . .	109	76·65
1884 . .	116	76·77
1885 . .	§§	§§
1886 . .	...	...
1887 . .	...	...
1888 . .	...	...
1889 . .	...	...
1890 . .	...	...
1891 . .	...	...
1892 . .	...	...
1893 . .	...	...
1894 . .	...	...
1895 . .	...	...
1896 . .	...	...
1897 . .	...	...
1898 . .	...	...
1899 . .	...	...
1900 . .	...	...
1901 . .	Amalgamated with the Great Indian Peninsula railway.	

* Capital expenditure to the 31st December 1900, including expenditure on the Wardha Coal and Dhond-Manmad railways.
† For the 1st half of 1900.
‡ For the 2nd half of 1900.
§ Including outlay on the Khamgaon and Amraoti railways, leased in perpetuity to the British Government.
‖ Including the figures of the Khamgaon and Amraoti railways for the 2nd half of 1902.
** Included with the Great Indian Peninsula railway.
†† For the 1st half of 1900. The figures for the 2nd half of 1900 are included with those of the Great Indian Peninsula railway.
§§ Included with the Great Indian Peninsula railway from 1891.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads}(a) \text{ to } (g)}$. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

Calendar year.	KHAMGAON BRANCH. TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.	AMRAOTI BRANCH. TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	Rs.		Rs.	
1879	5,35,617	30,086	—266	...	146	100·69	4,77,043	69,904	16,175	3·39	224	76·86
1880	5,19,888	27,363	4,922	0·94	91	84·44	4,45,585	50,866	3,639	0·82	163	92·85
1881	4,99,271	41,506	4,561	0·92	*	*	4,45,663	53,934	34,424	7·72	*	*
1882	4,91,164	75,966	30,389	6·19	*	*	4,14,651	85,147	39,535	8·89	*	*
1883	4,90,996	62,657	22,469	4·58	151	64·14	4,44,860	96,160	42,387	9·88	308	53·34
1884	4,90,903	46,830	13,037	2·66	113	72·16	4,44,774	76,782	34,174	7·68	246	55·49
1885	4,90,739	41,363	11,020	2·25	...	...	4,44,730	80,803	34,447	7·75	...	...
1886	4,89,618	59,452	20,233	4·13	...	...	4,44,686	95,111	44,137	9·93	...	...
1887	4,89,180	53,479	16,990	3·47	...	...	4,44,308	88,157	35,855	8·07	...	...
1888	4,88,357	52,635	15,797	3·23	113	...	4,43,892	81,710	30,886	6·96	...	...
1889	4,90,911	65,372	22,528	4·59	...	...	4,45,615	1,02,023	41,671	9·35	...	...
1890	4,90,520	55,288	26,092	5·32	...	...	4,45,155	1,01,502	46,254	10·39	...	...
1891	4,90,408	66,675	32,620	6·65	...	...	4,49,395	1,12,909	53,393	11·88	...	...
1892	4,89,132	65,548	30,909	6·32	...	...	4,50,160	1,05,762	48,637	10·80	...	...
1893	4,87,567	21,697	21,997	4·51	...	...	4,49,998	43,941	43,056	9·57	...	...
1894	4,86,003	21,966	21,667	4·46	...	...	4,49,461	42,795	41,910	9·32	...	...
1895	5,20,947	26,031	26,031	5·00	...	...	4,49,988	39,137	38,252	8·50	...	...
1896	5,22,603	24,446	24,446	4·68	...	...	4,51,119	43,756	42,871	9·50	...	...
1897	5,22,150	13,901	13,901	2·66	...	...	4,52,445	30,746	29,862	6·60	...	...
1898	5,22,150	24,326	24,326	4·66	...	...	4,54,498	40,057	39,172	8·62	...	...
1899	5,22,150	41,850	14,850	2·84	...	...	4,54,417	33,099	32,214	7·09	...	...
1900	5,22,150	33,783	13,924	2·67	...	...	4,54,418	78,582	32,436	7·14	...	...
1901	5,22,150	49,378	23,337	4·47	120	52·74	4,51,915	1,08,578	50,537	11·12	365	53·73
1902	*	†32,968	†17,209	...	120	52·35	*	†79,582	†41,099	...	468	53·88
1903	Amalgamated with the Great Indian Peninsula railway.											

6 (*b*) Bhopal-Itarsi railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Itarsi to Hoshangabad	31-7-80	1-6-82	10·89		1882	11
Hoshangabad to Bhopal		18-11-84	46·22		1883	11
Total, main line	...	...	...	57·11	1884 to 1903	57
Branch—						
Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal	July '94	11-11-95	0·28	0·28		
TOTAL	...	...	...	57·39		

Details of construction—

Permanent-way.—The line was originally laid with 62 lb. steel rails. Up to the end of December 1903, 49·08 miles of track have been relaid with Indian Midland railway 80 lb. steel rails. The sleepers were partly of steel and partly of creosoted pine and other kinds of wood. The wooden sleepers have been renewed from time to time with Indian Midland railway pot sleepers. A similar operation has now been taken in hand with the steel trough sleepers in the road, of which eleven miles have been renewed with Indian Midland railway pot.

* Included with the Great Indian Peninsula railway.
† For the 1st half of 1902.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 6}}{\text{Sub-heads (a) to (g)}}$. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

6 (*b*) Bhopal-Itarsi railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Ballast.—The line is fully ballasted throughout.

Bridges.—See appendix 36.

Fencing.—The line is wholly fenced.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Terms of contracts—

The Bhopal-Itarsi railway is worked under the following :

Agreement of—16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890 Agreement supplemental to that of 1880 for division of profits.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows :—

Government aid.—The British Government has paid for the portion, 13·11 miles, in British territory, and moiety of the cost of the bridge over the Nerbudda or in all, about 13 lakhs ; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend and are applicable to the Bhopal-Itarsi railway.

Power of Company to surrender contracts.—Nil.

Terms of working.—The Company receive a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

Rates and fares.—The same rates and fares as are in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	TABLE I. Bhopal-Itarsi (British section). Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Bhopal-Itarsi (Native State section). Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	TABLE II. British section. Earnings per mile per week.	Proportion of expenses to earnings.	Native State Section. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1880	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...
1882	12,50,000	14,376	2,704	0·08	50,000	—47,296	34,60,091	14,376	2,704	0·08	70*	81·90*	...	...
1883	12,50,000	25,573	—9,135	...	50,000	—59,135	38,23,236	25,573	—9,135	...	43*	135·72*	...	...
1884	12,50,000	7,664	—1,406	...	50,000	—51,406	45,83,261	28,102	—5,152	...	40*	104·13*	...	...
1885	12,50,000	27,425	—3,874	...	50,000	—53,874	47,71,375	1,04,683	—14,789	...	†	†	†	†
1886	12,50,000	27,822	—3,240	...	50,000	—53,240	48,26,036	1,47,416	—12,501	...	†	†	†	†
1887	12,50,000	48,227	3,850	0·31	50,000	—46,150	48,09,939	1,85,576	14,813	0·31	†	†	†	†
1888	12,50,000	55,117	5,340	0·43	50,000	—44,660	48,61,701	1,86,548	18,072	0·38	†	†	†	†
1889	12,50,000	79,163	—5,422	...	50,000	—55,422	48,40,846	2,67,936	—18,351	...	117	106·85	117	106·85
1890	12,85,077	87,765	—16,572	...	50,351	—66,923	50,00,000	2,97,049	—56,093	...	130	118·88	130	118·88
1891	15,13,568	1,30,884	48,607	3·21	57,713	— 9,106	50,00,000	4,66,431	1,73,154	3·46	200	62·50	199	62·50
1892	17,46,208	1,53,099	56,397	3·23	69,131	—12,734	50,00,000	4,47,797	1,65,883	3·32	226	63·16	195	62·96
1893	20,25,058	1,69,162	52,038	2·57	78,429	—26,391	50,00,000	4,24,236	1,30,925	2·62	251	69·17	185	69·17
1894	21,71,496	1,61,638	61,455	2·83	83,509	—22,054	50,00,000	3,80,217	1,44,679	2·89	237	61·98	166	61·97
1895	22,47,963	1,42,658	46,114	2·05	89,323	—43,209	50,00,000	3,18,074	1,02,821	2·06	209	67·68	138	67·64
1896	22,71,877	1,63,688	62,744	2·76	90,107	—27,363	50,00,000	3,61,363	1,38,532	2·77	241	61·75	157	61·63
1897	22,97,134	1,52,215	61,135	2·66	91,805	—30,671	50,00,000	3,31,379	1,38,070	2·66	223	59·84	144	59·84
1898	23,24,365	1,93,364	79,485	3·42	92,477	—13,042	50,00,000	4,17,010	1,71,375	3·43	284	58·81	181	58·90
1899	23,61,938	2,09,611	84,080	3·56	93,303	— 9,223	50,00,000	4,47,225	1,79,444	3·59	307	59·89	194	59·88
1900	23,87,339	2,55,120	1,27,332	5·33	95,293	+32,039	50,00,000	7,90,489	2,67,288	5·35	375	50·12	332	50·06
1901	25,46,891	2,92,861	1,44,235	5·66	98,989	+45,246	50,00,000	5,85,152	2,88,838	5·77	430	50·75	254	50·64
1902	28,02,330	3,53,111	1,71,236	6·11	1,06,632	+64,604	50,00,000	6,30,030	3,16,683	6·33	518	51·51	274	49·74
1903	30,92,697	3,77,177	1,91,443	6·19	1,17,285	+74,158	50,00,000	6,81,911	3,21,328	6·43	559	49·48	327	48·84

6 (*c*) Bhopal-Ujjain railway (5′ 6″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bhopal to Ujjain	10-11-92	11-11-95	113·27	113·27

* Represents figures for both sections of the Bhopal-Itarsi railway.
† Included with the Great Indian Peninsula railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

6 (*c*) Bhopal-Ujjain railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails laid on transverse steel sleepers.

Ballast.—The line is fully ballasted throughout.

Fencing.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Bhopal-Ujjain and Bina-Goona-Baran railways are worked under the following :—

Agreements of—15th July 1896, 4th August 1896, 12th May 1899 (between the Government of Her Highness the Begum of Bhopal and that of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working.

27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company) for working.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the agreements are as follows :—

Government aid.—The line from Bina to Baran is owned jointly by the Darbars of the Gwalior, Tonk and Kotah States; and that from Bhopal to Ujjain by the Bhopal and Gwalior States.

Currency of agreements.—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

*Terms of working.**—The Company retain 50 per cent. of the gross receipts of the railway of each half year; and receive rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively; and rent for the telegraph lines and instruments when not the property of the railway.

†The Company retain out of the gross receipts a sum (which includes any single item of capital expenditure, not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year.

Rates and fares.—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	88,462	...	...	...	...	...
1893	22,76,863	...	...	...	...	...
1894	53,53,849	...	...	...	...	...
1895	69,69,831	...	...	...	...	...
1896	77,77,604	3,69,114	1,80,218	2·32	63	51·17
1897	75,36,180	3,72,337	1,84,660	2·45	63	50·40
1898	75,85,789	4,16,940	2,05,051	2·70	71	50·82
1899	76,54,290	5,82,341	2,77,911	3·63	99	52·28
1900	76,88,020	9,46,349	4,65,681	6·06	161	50·79
1901	77,61,569	5,45,956	2,62,044	3·38	93	52·00
1902	78,02,855	5,82,063	2,92,357	3·75	99	52·36
1903	78,11,402	4,44,766	2,23,049	2·86	76	49·85

6 (*d*) Bina-Goona-Baran railway (5′6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
From the joint boundary of the Indian Midland and Bina-Goona-Baran railways, a point 2·00 miles from the centre of Bina station, to Goona	2-3-92	23-9-95	71·73	...	1895 to 1898	72
From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet)	28-1-97	15-5-99	73·90	...	1899 to 1903	146
Total, Bina-Goona-Baran	...	...	...	145·63	...	...

* These terms are applicable only to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Gwalior State.

† These terms are applicable only to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Bhopal, Tonk and Kotah Darbars.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 6}}{\text{Sub-heads (a) to (g)}}$ **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*d*) Bina-Goona-Baran railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—On the Bina-Goona section, the permanent-way consists of 75 lb. steel rails laid on steel transverse sleepers. On the Goona-Baran section, the permanent-way consists of 75 lb flat-footed steel rails with 4 holed fish-plates laid on deodar sleepers.

Ballast.—The line is fully ballasted throughout.

Fencing.— The line is fenced throughout from Bina to Goona, but the Goona-Baran section is unfenced except at stations.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

Terms of contract.—Those mentioned under the Bhopal-Ujjain railway (page 215) apply.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	51,905	...	...	...	...	...
1892	2,57,611	...	...	...	...	...
1893	35,18,701	...	...	...	...	...
1894	47,79,618	...	...	...	...	...
1895	49,81,035	...	...	...	19	54·42
1896	54,16,074	91,140	36,821	0·68	24	59·60
1897	87,73,621	1,02,386	43,446	0·50	27	57·57
1898	97,66,068	1,30,004	58,040	0·59	35	55·36
1899	99,81,680	2,67,359	1,26,108	1·27	43	52·83
1900	1,00,21,605	4,34,847	2,20,490	2·20	57	49·29
1901	1,00,43,286	2,52,716	1,22,970	1·22	33	51·34
1902	99,14,442	2,38,825	1,19,792	1·21	32	52·71
1903	99,62,459	3,21,585	1,62,447	1·63	42	49·49

6 (*e*) Indian Midland railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Bhopal to Jhansi	*	1-1-89	180·49		1878	34
Jhansi to Gwalior	11-6-86	1-3-89	60·39		1879	66
Gwalior to Hatampur	24-8-77	20-12-79	32·40		1880	66
Hatampur to Dholpur		15-5-81	8·55		1881	75
Dholpur to Agra Cantonment	16-2-76	10-1-78	33·69		1882	75
Total, main line	...	...	...	315·52	1883	75
Branches—					1884	75
Manikpur branch—					1885	75
Jhansi to Mau Ranipur	23-8-83	5-6-89	39·96		1886	117
Mau Ranipur to Banda		1-8-89	78·96		1887	117
Banda to Manikpur		15-2-89	61·45			
			180·37		1888	211
					1889	677
Cawnpore branch—					1890	677
Jhansi to Chaunrah	Cawnpore to Kalpi, 12-3-84; Kalpi to Jhansi, 3-3-86.	1-2-88	94·99		1891	677
Chaunrah to Cawnpore		1-4-86	40·44		1892	677
			135·43		1893	677
					1894	677
Bina to point of junction with Bina-Goona-Baran railway.	...	1-5-95	2·00		1895	679
Bhopal to point of junction with Bhopal-Ujjain railway.	...	11-11-95	0·21		1896	680
			2·21		1897	680
					1898	727
Bina-Saugor-Katni branch—					1899	796
Bina to Saugor	Aug.'87	5-6-89	46·24		1900	796
Saugor to Damoh	Dec.'95	26-3-98	47·83		1901	796
Damoh to Katni	Jan.'86	1-1-99	67·88		1902	797
From centre of Katni-Murwara station to junction with Bengal-Nagpur railway.	...	1-1-90	0·71		1903	805
Connecting link with East Indian railway at Katni-Murwara from points in Indian Midland railway main line to junction with East Indian railway.	...	1-1-99	0·34			
			163·00			
Ait to Kutch	23-9-02	7-12-03	8·50			
Total branches	...	...	...	489·51		
TOTAL OPEN MILEAGE, INDIAN MIDLAND RAILWAY	...	...	...	805·03		

* Sanctioned in sections as follows:—Bhopal to Bhilsa, 2nd March 1886; Bhilsa to Basoda, 24th June 1886; Basoda to Lalitpur, 24th December 1886 and Lalitpur to Jhansi, 21st September 1886.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 6}{\text{Sub-heads } (a) \text{ to } (g)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*e*) Indian Midland railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The main line, with the branches from Jhansi to Manikpur, Jhansi to mile 325·50 (Cawnpore branch) and Bina to Katni, is laid with 80 lb. flat-footed steel rails on cast-iron oval pot sleepers. From mile 325·50 (Cawnpore branch) to mile 331 (0·75 mile beyond Jumna bridge) the permanent-way consists of East Indian railway 75 lb. double headed steel rails laid on wooden sleepers, and from there to Cawnpore a length of about 46 miles on Denham and Olpherts' sleepers. The latter are now being gradually replaced by iron pots of the Great Indian Peninsula pattern, 0·85-mile having been laid to 31st December 1902. The East Indian railway type rails and wooden sleepers between miles 325·50 and 331·00 are also being renewed with Indian Midland railway 80 lb. flat-footed steel rails and cast iron oval pots.

Ballast.—The line is fully ballasted throughout.

Bridges.—See Appendix 36.

Fencing.—The line is fenced throughout, except between Banda and Jhansi on the Jhansi-Manikpur section. On the Saugor-Katni branch, fencing has been erected through Saugor Cantonments and at Damoh and Katni-Murwara stations only.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra, 1 in 150 and between Jhansi and Manikpur, 1 in 125. The Jhansi-Cawnpore branch is practically level except at bridge approaches where the gradients are 1 in 250 and 1 in 300; and between Jhansi and Garhmau where it is 1 in 200. On the Bina-Katni-Murwara branch the gradient is 1 in 200, except for 3 miles on the Khurai-Mundra section where it is 1 in 100 and on the Ghatera Salaia section where there are short lengths of 1 in 125 and 6 miles of 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—2nd October 1885—Indian Midland Railway Company's principal contract.

18th March 1890—Contract for the acquisition of the Scindia railway.

13th June 1896—Contract for the Saugor-Katni railway.

21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid.—Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system, and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company only raising the amount required for expenditure in England. Land was also provided free.

Currency of contracts—(1) *Indian Midland railway contract.*—The contract of 1885 may be determined by Government, by giving 12 months' previous notice, on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract, the Company is to hand over to Government the railway and all its belongings of every description and Government is to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900. But the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits (as stated below) remains in full force till the termination of either the contract of 1885 or that of 1900.

(2) *Scindia and Saugor-Katni railways contracts.*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*e*) Indian Midland railway (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	TABLE II. Scindia. Earnings per mile per week.	Scindia. Pro: of exp: to earnings.	Indian Midland. Earnings per mile per week.	Indian Midland. Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.	
1878	...	...	...	...	...	...	...	54	133·30	...	
1879	78,22,551	90,916	—33,772	...	3,06,178	...	—3,37,950	39	134·95	...	
1880	81,63,253	2,01,823	20,129	0·25	3,57,620	...	—3,37,491	58	88·05	...	...
1881	88,16,663	3,01,681	78,342	0·91	3,48,809	...	—2,70,467	81	77·35	...	...
1882	87,63,714	3,29,299	92,231	1·05	3,47,303	...	—2,55,072	85	71·99	...	...
1883	92,92,537	3,38,511	1,59,716	1·72	3,56,750	...	—1,97,034	87	52·82	...	...
1884	1,18,68,111	3,68,326	1,72,603	1·45	3,74,122	...	—2,01,519	95	53·14	...	...
1885	1,60,14,107	3,94,081	1,99,680	1·24	6,48,112	...	—4,48,432	101	49·33	...	...
1886	2,48,06,293	3,91,832	2,14,526	0·86	18,69,268	...	—16,54,742	101	49·69	56	82·03
1887	5,10,96,457	6,32,204	2,78,043	0·54	20,00,184	...	—17,22,141	117	46·62	81	80·63
1888	6,96,63,213	10,27,633	3,74,204	0·54	28,55,488	...	—24,81,284	95	47·74	99	72·53
1889	7,84,45,085	30,69,255	6,33,111	0·81	31,24,456	...	—24,91,045	...	...	92	77·32
1890	8,32,79,427	31,22,365	5,99,780	0·72	36,09,286	...	—30,09,506	...	...	86	80·80
1891	8,52,46,148	41,62,361	13,52,172	1·59	33,12,200	...	—19,60,028	...	...	115	67·51
1892	8,65,79,006	44,77,625	17,26,260	1·99	37,23,985	...	—19,97,725	...	...	124	61·45
1893	8,71,62,843	44,59,053	17,00,409	1·95	41,40,194	...	—24,39,785	...	...	123	61·87
1894	8,78,06,437	52,22,033	22,02,334	2·51	42,59,815	...	—20,57,481	...	...	144	57·83
1895	8,81,49,985	44,91,707	16,48,360	1·87	45,97,495	...	—29,49,135	...	...	124	63·30
1896	9,25,53,896	48,51,951	20,17,329	2·18	44,23,983	...	—24,06,154	...	...	134	58·41
1897	9,77,94,421	54,89,540	24,06,565	2·46	42,53,893	...	—18,47,328	...	...	150	56·16
1898	9,96,74,805	56,25,823	25,11,911	2·52	39,99,986	...	—14,88,075	...	...	147	55·35
1899	10,16,34,072	64,77,226	27,82,950	2·74	39,66,461	...	—11,83,511	...	...	152	57·03
1900	10,31,35,002	90,60,560	48,72,287	4·72	38,18,460	...	+10,53,827	...	...	213	46·23
1901	10,58,27,081	82,43,068	42,50,587	4·02	38,82,861	1,88,164	+ 1,79,562	...	...	199	48·43
1902	10,62,11,714	90,49,628	44,86,267	4·22	41,04,505	7,330	+ 3,74,432	...	...	209	50·43
1903	10,98,96,302	80,86,118	40,92,942	3·73	41,85,502	2,062	— 94,622	...	...	180	49·35

6 (*f*) Gwalior Light railway (2′ 0″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Gwalior to Sipri	...	2-12-99	73·81		1899 to 1903	12
Gwalior to Bhind	...	2-12-99	52·33			
Total open mileage	...	...	...	126·14		
Line under construction or sanctioned for construction.						
Gwalior to Jaura	2-10-01	1-1-04	31·34			
Jaura to Subalgarh		...	26·52			
Total line under contstruction	...	...	...	57·86		
Grand Total	...	...	...	184·00		

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. steel rails laid on sal and steel trough sleepers, Indian State railway pattern.

Ballast.—The line is fully ballasted throughout.

Fencing.—The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract.—Either party may determine the agreement by giving three months' notice.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 6}{\text{Sub-heads } (a) \text{ to } (g)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*concld.***

6 (*f*) Gwalior Light railway (2′ 0″ gauge)—*concld.*

Terms of contract—*concld.*

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed and all other expenses connected therewith and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal *plus* 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares.—Rates and fares are the same as those in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,466	...	...	...	...	...
1897	1,03,552	...	...	...	...	...
1898	9,30,815	...	...	...	...	...
1899	22,79,267	4,094	—4,113	...	6	258·32
1900	27,10,557	84,617	—137	...	13	100·16
1901	31,07,277	82,227	—520	...	13	100·63
1902	39,77,104	1,09,577	9,346	0·33	17	91·47
1903	41,76,353	1,66,002	68,226	1·63	25	58·90

6 (*g*) Agra-Delhi Chord railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Agra to Delhi	15-9-98	*1-10-04	120·10	120·10

The line is under construction and will be worked, on completion, by the Great Indian Peninsula Railway Company.

Number $\frac{\text{Main head } 7}{\text{Sub-heads } (a) \text{ to } (i)}$. MADRAS RAILWAY SYSTEM—

Lines comprising system.—The Madras railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Madras railway	(5′ 6″ gauge)	899·91	3·90	903·81
(*b*) Kolar Gold-fields railway	(5′ 6″ gauge)	9·88	...	9·88
(*c*) Madras railway (North-East line), East Coast State railway	(5′ 6″ gauge)	497·19	0·93	498·12
(*d*) Nilgiri State railway	(3′ 3⅜″ gauge)	16·99	11·50	28·49
(*e*) Shoranur-Cochin railway	(3′ 3⅜″ gauge)	64·75	...	64·75
(*f*) *Azhikal-Mangalore Extension*	(5′ 6″ *gauge*)	...	77·27	77·27
(*g*) *Salem-Attur*†	(5′ 6″ *gauge*)	...	36·06	36·06
(*h*) *Morappur-Dharmapuri*	(2′ 6″ *gauge*)	...	18·36	18·36
(*i*) *Tirupattur-Krishnagiri*	(2′ 6″ *gauge*)	...	25·43	25·43
	Total	1,488·72	173·45	1,662·17

Running powers—

Foreign lines over Home line—

	Miles.
Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station	0·89
Bengal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)	4·97
Southern Mahratta railway, Tadepalli to Bezwada	2·97
	8·83

The Madras railway runs from Madras to Arkonam, where it divides into two branches—one proceeding in a north-westerly direction to Raichur, the other in a south-westerly direction to Azhikal. The latter has branches to Ranipet, Bangalore, Mettupalaiyam and Palghat.

The main line originally commenced at Rayapuram, but on the opening of the length between Veyasarpaudy Junction and the Central station this became a portion of the main line, and the old line from the junction to Rayapuram was then treated as a branch. The line from Bangalore Cantonment to Bangalore City was constructed as a part of the Mysore State railway, but was subsequently made over to the Madras Railway Company. The portion from Gudur to Nellore which was originally laid on the 3′ 3⅜″ gauge was converted to 5′ 6″ gauge, on the opening of the East Coast State railway. The working of the East Coast State railway (North-East line) was taken over by the Madras Railway Company from the 1st January 1901.

* Probable date of opening.
† Commencement of work not yet authorized.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 7 / Sub-heads (*a*) to (*i*) **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*a*) Madras railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
SOUTH-WEST LINE—			Miles.	Miles.		Mi
Main line—						
Madras to Veyasarpaudy	April 1868	7-4-73	2·16		1856	
Veyasarpaudy to Arcot	Veyasarpaudy to Arkonam, between July 1853 and February 1854;	1-7-56	63·22		1857	
Arcot to Katpadi		7-5-57	14·96		1858	
Katpadi to Gudiyattam		19-5-58	15·36		1859	
Gudiyattam to Ambur		16-1-60	17·01		1860	
Ambur to Vaniyambadi		1-2-60	9·98		1861	
Vaniyambadi to Tirupattur		23-5-60	14·19		1862	447
Tirupattur to Salem		1-2-61	69·98		1863	447
Salem to Sankaridrug	Arkonam to Kadalundi, between February 1854 and May 1857.	1-12-61	23·68		1864	569
Sankaridrug to Podanur		12-5-62	71·18		1865	609
Podanur to Pattambi		14-4-62	64·96		1866	643
Pattambi to Kuttippuram		28-9-61	11·50		1867	643
Kuttippuram to Tirur		1-5-61	9·39		1868	676
Tirur to Kadalundi		12-3-61	16·31		1869	705
Kadalundi to Calicut	August 1884.	2-1-88	9·25		1870	781
Calicut to Badagara	6-5-97	1-10-01	28·95		1871	880
Badagara to Tellicherry		1-5-02	14·73		1872	830
Tellicherry to Cannanore		20-5-03	11·82		1873 to 1881	858
Total main line	...	...	...	468·63		
Branches—					1882	861
Rayapuram branch—					1883	861
Veyasarpaudy to Rayapuram	9-6-53	1-7-56	2·16		1884	861
Rayapuram to Beach	16-12-99	22-1-00	1·03		1885	861
			3·19		1886	860
Ranipet Branch—					1887	*827
Walajah Road (Arcot) to Ranipet	9-12-97	17-4-99	4·17		1888 to 1898	839
Bangalore branch—					1899	843
Jalarpet Junction to Bangalore Cantonment	1862	1-8-64	84·37		1900	844
Bangalore Cantonment to Bangalore City	March 1881	1-7-82	3·05		1901	873
			87·42		1902	888
Nilgiri branch—					1903	906
Podanur Junction to Coimbatore	17-8-70	1-2-73	3·78			
Coimbatore to Mettupalaiyam		31-8-73	21·97			
			25·75			
Palghat branch—						
Olavakkot to Palghat	4-1-87	2-1-88	2·47			
Total branches	...	...	...	123·00		
TOTAL, SOUTH-WEST LINE	...	...	...	591·63		
NORTH-WEST LINE—						
Main line—						
Arkonam to Nagari	23-6-59	4-3-61	17·27			
Nagari to Puttur	23-6-59	8-12-61	9·59			
Puttur to Renigunta	& 3-1-69	15-9-62	14·46			
Renigunta to Reddipalle	31-1-61 & 26-5-63	1-10-64	38·02			
Reddipalle to Cuddapah	26-5-63 & 18-11-63	1-9-65	39·59			
Cuddapah to Muddanuru	18-11-63, 20-7-63 & 22-7-65	1-8-66	34·31			
Muddanuru to Tadpatri	8-5-65 & 22-7-63	1-9-68	32·07			
Tadpatri to Gooty	8-5-65 24-5-65 & 25-5-66	1-8-69	29·72			
Gooty to the Tungabhadra river	22-6-66 & 23-8-69	12-12-70	75·33			
Tungabhadra to Raichur	22-9-69	15-3-71	17·92			
TOTAL, NORTH-WEST LINE	...	...	...	308·28		
TOTAL OPEN MILEAGE, MADRAS RAILWAY PROPER	...	...	...	899·91		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.						
Madras (South-West line)—						
Cannanore to Azhikal	6-5-97	15-3-04	3·90	3·90		
GRAND TOTAL, MADRAS RAILWAY PROPER	...	...	...	903·81		
DOUBLE LINE, SOUTH-WEST LINE—						
Washermenpet to Veyasarpaudy	21-3-01	14-9-01	1·02			
Madras to Veyasarpaudy Junction	Probably 71—72	7-4-73	2·16			
Veyasarpaudy Junction to Perambur		7-2-74	1·30			
Perambur to Avadi	Probably 75—76	1-5-77	9·54			
Avadi to Tiruvallur		20-7-77	12·39			
Tiruvallur to Arkonam		28-8-77	16·52			
TOTAL DOUBLE LINE, SOUTH-WEST LINE	...	...	43·43			

* The decrease was due to the transfer of the Bellary branch (Guntakal to Bellary) to the Southern Mahratta railway from 1887.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 7}}{\text{Sub-heads (a) to ( )}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*a*) Madras railway proper (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line was originally laid with iron rails weighing 65 to 84 lbs. per yard on jungle wood sleepers. The latter were found to be very short lived and were replaced by cast iron pot sleepers. The iron rails from Madras to 39th mile were renewed with 75lb. doubled-headed steel rails and afterwards other sections with 75lb., 76lb. and 80lb. ...headed steel rails. The section, Calicut to Cannanore, is laid with 60lb. flat-footed steel rails on wooden sleepers. ...present type of permanent-way is 80lb. bull-headed steel rails on cast iron pots, each weighing 112 lbs.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Bridges.—See Appendix 36.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet except on the Beach line extension where the minimum radius of curve is 700 feet.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghât where it is 1 in 70 and at Walayar Ghât where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghât where it is 1 in 66); between Podanur and Mattupalaiyam, 1 in 80; between Olavakot and Palghat, 1 in 160; between Wallaja Road and Ranipet, 1 in 150 and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghât where it is 1 in 66).

Terms of contracts—

The Madras railway is worked under the following contracts:—

Contracts of—22nd December 1852 (South-West line).
19th December 1855 (South-West line).
13th August 1858 (North-West line).
2nd January 1871 (Amalgamation).
18th January 1901 (Calicut-Azhikal extension).
1st November 1901 Walajah Road (Arcot)-Ranipet branch.

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

Currency of contracts.—In ninty-nine years from 1st April 1857, the line reverts to Government who would then pay only for the rolling-stock at its fair value. Provided the Company had not previously given notice terminating the contract. Government may determine the contract by purchase within six months after the expiration of 25 or 50 years of the term, at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fail to observe their obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

Power of Company to surrender contract.—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1871. After deducting the working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) the surplus profits after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1*s.* 10*d.* per rupee are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901, the covenants and provisions of the several principal Indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract, Government fixed maxima rates and fares which cannot be altered by Government, until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary their rates within the prescribed maxima without reference to Government.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

7 (*a*) Madras railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Guaranteed Interest. *	Company's share of net traffic receipts. †	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	11,45,68,493	66,26,486	20,75,170	1·81	57,04,205	...	—36,29,035
1880	11,39,78,220	61,62,546	19,57,137	1·73	57,16,332	...	—37,59,195
1881	11,40,07,808	63,11,312	20,75,856	1·82	57,16,365	...	—36,40,509
1882	11,39,69,608	69,18,571	25,70,341	2·25	56,89,011	...	—31,18,170
1883	11,39,92,074	66,31,909	25,26,540	2·22	57,08,416	...	—31,81,867
1884	11,42,51,164	71,41,318	29,35,687	2·57	64,23,432	...	—34,87,745
1885	11,50,33,180	76,57,993	32,79,168	2·85	67,36,206	...	—34,57,038
1886	11,59,81,297	79,66,097	32,29,243	2·78	71,24,952	...	—38,95,709
1887	11,40,70,190	81,72,535	28,80,029	2·52	73,20,202	...	—44,40,178
1888	11,53,78,656	85,31,054	35,21,615	3·05	76,23,851	...	—41,02,236
1889	11,63,84,605	91,10,894	37,38,421	3·21	76,69,934	...	—39,31,513
1890	11,79,84,284	95,06,134	45,21,480	2·83	68,85,958	...	—23,64,478
1891	11,89,52,099	93,44,698	39,06,529	3·28	73,92,186	...	—34,85,657
1892	11,97,71,335	96,24,670	42,92,133	3·58	83,62,369	...	—40,70,236
1893	12,03,89,499	1,05,05,036	54,21,742	4·50	84,82,732	...	—30,60,990
1894	12,05,25,315	1,08,21,012	49,47,863	4·10	96,56,469	...	—47,08,606
1895	12,08,91,797	1,12,08,407	58,10,310	4·80	96,17,435	53,195	—38,60,320
1896	12,11,52,091	1,08,80,251	53,85,291	4·44	89,92,684	...	—36,07,393
1897	12,15,01,808	1,14,65,314	59,82,565	4·92	84,81,597	91,135	—25,90,167
1898	12,22,69,990	1,07,29,483	54,12,657	4·43	82,40,191	90,546	—29,18,080
1899	12,34,93,025	1,05,45,102	50,16,254	4·06	80,58,144	...	—30,41,890
1900	12,62,82,369	1,13,39,222	53,70,820	4·25	81,24,701	...	—27,53,881
1901	13,13,51,379	1,14,86,803	57,35,603	4·40	83,15,733	...	—25,30,130
1902	13,50,23,683	1,18,41,074	57,91,420	4·29	84,41,464	...	—26,50,044
1903	13,64,08,517	1,26,21,022	55,67,364	4·08	84,39,331	...	—28,71,967

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	
1856	75	[illegible]
1857	91	[illegible]
1858	93	55·53
1859	122	60·35
1860	117	73·50
1861	91	71·08
1862	84	74·02
1863	110	68·57
1864	133	49·62
1865	145	45·69
1866	147	45·62
1867	153	43·47
1868	181	41·48
1869	171	49·16
1870	146	52·84
1871	139	51·27
1872	148	52·19
1873	157	56·94
1874	132	64·67
1875	144	70·28
1876	159	64·38
1877	225	59·26
1878	148	76·05
1879	148	68·68
1880	138	68·24
1881	141	67·11
1882	155	62·84
1883	148	61·90
1884	160	58·89
1885	171	57·18
1886	178	59·46
1887	189	64·76
1888	195	58·72
1889	209	58·97
1890	218	52·44
1891	214	58·20
1892	221	55·40
1893	241	48·39
1894	237	52·06
1895	257	47·55
1896	249	50·50
1897	268	47·65
1898	246	49·51
1899	240	52·43
1900	254	51·75
1901	253	49·63
1902	256	50·25
1903	261	55·88

7 (*b*) Kolar Gold-fields railway (5′ 6″ gauge).

The line was constructed by the Mysore State in order to provide facilities for the gold-fields.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bowringpet to Marikuppam	July 1892	1-6-94	9·88	9·88

Details of construction—

Permanent-way.—The line was originally laid with Madras railway second-hand doubled-headed 75lb. iron rails on new cast iron pot sleepers, but in consequence of the excessive wear due to the heavy traffic passing over this branch, the alignment has been improved and iron rails have been replaced by 76lb. steel rails.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 60.

* Converted at the current rates of exchange.

† According to terms of contract.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

7 (*b*) Kolar Gold-fields railway (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows :—

Government aid.—The line is the property of the Mysore State.

Currency of agreement.—The agreement to remain in force, subject to six months' notice, from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system and 5 per cent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	27,661	...	...	...	...	...
1893	5,27,634	...	...	...	...	...
1894	6,56,175	75,771	29,273	4·46	249	61·37
1895	6,61,654	1,52,953	66,379	10·03	234	56·60
1896	7,45,004	1,55,817	63,287	8·50	299	59·25
1897	7,91,074	2,08,854	90,278	11·41	402	56·77
1898	8,09,537	2,04,002	82,133	10·15	392	59·92
1899	10,79,552	1,77,667	56,827	5·27	342	68·01
1900	10,77,901	2,06,892	67,993	6·22	402	67·88
1901	11,20,330	2,17,661	91,877	8·20	421	57·79
1902	11,38,480	2,16,629	84,864	7·45	422	60·83
1903	11,62,504	2,07,257	75,237	6·47	403	67·70

7 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Washermenpet to Ennur	August 1894	22-2-96	8·25		1893	266
Ennur to Gudur	July 1895	28-2-99	75·25		1894	354
Gudur to Nellore		*1-11-88	23·75		1895	422
Nellore to Kistna Canal Junction		20-12-98	155·00		1896	512
Kistna Canal Junction to Bezwada		15-7-97	3·06		1897	547 ‡
Bezwada to Kovvur		20-2-98	88·24		1898	727
Kovvur to Rajahmundry	July 1890	6-8-00	4·69		1899	803
Rajahmundry to the Junction point near Waltair		15-7-93	119·80		1900	808
Simachellam Junction point near Waltair station to Waltair		15-7-93	4·25		1901	497
Tadepalli to Bezwada		1-1-94	§ 2·97		1902	497
					1903	497
Total Main line	...	...	...	485·26		
Branches—						
Samalkot Junction to Cocanada port branch	July 1890	15-7-93	9·75			
Waltair to end of branch near Vizagapatam station		15-7-93	2·18			
Total Branch	...	...	...	11·93		
TOTAL OPEN MILEAGE, MADRAS (NORTH-EAST LINE)	...	...	...	497·19		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Korukkupettai to Basin Road	11th April 1901	† 1-7-04	0·93	0·93		
GRAND TOTAL	...	...	...	498·12		
DOUBLE LINE—						
Simachellam junction point near Waltair station to Waltair	...	...	4·25			

* The date of original 3′ 3¾″ gauge ; converted to and opened on the 5′ 6″ gauge on the 1st November 1899.
† Probable date of opening. ‡ Includes Northern section of the East Coast State railway. § 3′ 3¾″ gauge.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

7 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed 75lb. steel rails laid on wooden and pea-pod steel sleepers.
Ballast.—The line is ballasted with stone and sand, chiefly the former.
Bridges.—See Appendix 36.
Fencing.—The line is fenced only in the vicinity of towns, stations and level crossings.
Curves.—There are no curves with a radius of less than 1,000 feet.
Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair, 1 in 150.

Terms of contract—

The line is worked under the following contract:—
Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the agreement are as follows:—

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is terminated for any reason under the provisions thereof prior to the expiry of the term of this contract the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April 1904, or on the 1st April of any subsequent year.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters."

The share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway.

The allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras.

The expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders.

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require at six months' notice the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

Statistics of working*—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Interest	Gain or loss to the State.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1890	3,79,490	...	...	...	7,590	—7,590	...	...
1891	1,10,69,894	...	...	...	2,33,786	—2,33,786	...	...
1892	2,60,11,131	...	...	...	7,41,621	—7,41,621	...	...
1893	3,58,67,473	4,98,660	1,53,732	0·43	13,48,868	—11,95,136	68	84·69
1894	4,39,47,727	14,80,678	1,50,921	0·34	15,92,909	—14,41,988	98	89·81
1895	5,09,41,876	19,04,251	3,29,184	0·65	19,12,886	—15,83,702	90	82·71
1896	6,33,64,948	24,66,573	5,39,901	0·85	23,72,875	—18,32,974	94	77·98
1897	7,22,26,070	29,21,162	8,92,453	1·23	26,96,796	—18,44,243	100	69·59
1898	8,24,02,269	28,10,742	6,69,831	0·81	30,98,828	—24,28,997	94	76·46
1899	8,65,93,097	43,92,237	15,37,294	1·78	35,14,602	—19,77,308	104	65·11
1900	8,80,71,731	64,04,543	26,54,794	3·01	34,46,555	—7,91,761	143	56·10
1901	6,07,27,375	45,68,155	20,31,210	3·34	24,51,072	—4,19,862	176	65·62
1902	6,16,89,605	45,46,551	16,19,128	2·62	24,46,187	—8,27,059	177	64·29
1903	6,33,83,510	51,18,656	15,53,337	2·45	24,82,162	—9,28,825	176	65·62

7 (*d*) Nilgiri State railway (3′ 3⅜″ gauge).

The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894; and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the 1st January 1903.

* The figures prior to 1901 represent the transactions of the whole of the late East Coast State railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*d*) Nilgiri State railway (3′ 3½″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mettupalaiyam to Coonoor	Probably in 1892.	15-6-99	16·99	...	1899	17
					1900	17
					1901	17
Total open mileage	....	...	...	16·99	1902	17
					1903	17
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Coonoor to Ootacamund	6-11-03	...	11·50	11·50		
GRAND TOTAL	...	...	....	28·49		

Details of construction—

Permanent-way.—The permanent-way consists of steel rails, 50 lb. to the yard, laid on pyinkado sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—The curves vary from 318 feet to 716 feet in radius.

Gradient.—The ruling gradient is 1 in 12·5.

Terms of contract—

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903).

Government aid.—The line is the property of the State.

Currency of agreement—
Power to determine agreement— } The agreement may be terminated at any time on six months' notice from either party.

Terms of working.—The Nilgiri State railway to pay actual outlay on Engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working, the Madras railway to receive 25 per cent. of gross earnings *plus* 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital expenditure to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
1890	67,850	...	...	...	...	...	...	...	...	...	...
1891	2,89,134	...	...	...	...	...	...	...	...	...	...
1892	8,89,751	...	...	...	...	...	...	...	...	...	...
1893	15,50,000	...	...	...	...	...	...	...	...	...	...
1894	18,50,000	...	...	...	...	...	...	...	...	...	...
1895	22,60,000	...	...	...	...	...	...	...	...	...	...
1896	18,92,610	...	...	...	...	...	...	...	...	...	...
1897	36,84,977	...	...	...	...	...	...	...	...	...	...
1898	44,54,085	...	...	...	...	...	...	...	...	...	...
1899	47,89,944	84,448	20,209	0·42	24,392	44,600	0·93	...	...	175	76·06
1900	48,96,490	1,76,032	86,642	1·77	23,006	1,19,648	2·44	...	...	200	42·83
1901	43,74,254	2,41,336	1,37,883	2·83	...	1,37,883	2·83	...	...	275	42·87
1902	49,08,431	3,09,063	1,12,111	2·28	...	1,12,111	2·28	...	...	352	63·73
1903*	35,24,265	2,74,905	78,988	2·10	...	...	...	1,65,497	—91,509	311	73·09

* Purchased by the State with effect from the 1st January 1903.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

7 (*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Shoranur to Ernakulam	28-4-99	2-6-02	64·75	64·75

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone and sand, chiefly the former.

Fencing.—The line is fenced in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is 818·57 feet in radius.

Gradients.—The ruling gradient is 1 in 80.

Terms of contract—

The Shoranur-Cochin railway is worked under the following agreement:—

Agreement of—1st January 1901 (between His Highness the Rajah of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cochin State.

Currency of agreement.—This agreement is to remain in force until the termination of the present agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charge for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing from the net earnings, for the second contribution to the Madras railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Darbar and the Madras Railway Company in the proportion of four-fifths to the Darbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
	Rs.	Rs.	Rs.		Rs.	
1898	53,921	...	...	...	...	...
1899	80,927	...	...	...	...	...
1900	28,47,394	...	...	...	...	...
1901	50,82,280	...	...	...	...	...
1902	63,66,301	1,34,345	73,299	1·15	69	45·64
1903	64,41,390	3,52,964	1,98,023	3·07	105	43·90

7 (*f*) Azhikal-Mangalore railway (5′ 6″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Azhikal to Mangalore	28-6 01	1-1-07*	77·27	77·27

* Probable date of opening.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*concld.***

7 (*g*) Salem-Attur railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Salem to Attur	16-9-03	†	36·06	36·06

7 (*h*) Morappur-Dharmapuri railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Morappur to Dharmapuri	24-10-02	1-1-05*	18·36	18·36

7 (*i*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Tirupattur to Krishnagiri	24-10-02	1-1-05*	25·43	25·43

Number $\frac{\text{Main head 8}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—**

Lines comprising system.—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(*a*) Nizam's Guaranteed State railway (5′ 6″ guage)	330·13
(*b*) Bezwada Extension railway (5′ 6″ gauge)	20·58
(*c*) Hyderabad-Godavari Valley railway (3′ 3½″ gauge)	391·42
TOTAL	742·13

Running powers—

Home line over Foreign line:—

Distant signal at Bezwada to Bezwada station, Madras (North-East line) . . . . . 0·89

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884, it was worked by the State agency, and from January 1885, by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast State railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast State railway. It was transferred back to the Company for working from the 1st January 1901.

8 (*a*) Nizam's Guaranteed State railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Wadi junction to Secunderabad and to junction of new line.	25-3-71	2-10-74	115·45‡		1874 to 1885	121
Junction of new line to Warangal	Nov. '84	8-4-86	87·47		1886	204
Warangal to Dornakal	May '86	1-1-88	31·91		1887	205
Dornakal to Bona Kalu	Jany. '87	5-8-88	31·72		1888	306
Bona Kalu to the British frontier	Jany. '87	10-2-89	23·54		1889	330
					1890 to 1892	333
					1893 to 1897	332
Total main line	...	...	...	310·09	1898 to 1903	330
Branches—						
Hyderabad branch—						
Hussain Sagar to Hyderabad	25-3-71	9-10-74	3·54			
Mineral branch—						
Dornakal to Singareni Coal-fields	May '86	1-1-88	16·50			
Total branches	...	...	...	20·04		
GRAND TOTAL	...	...	...	330·13		

* Probable date of opening.
† Commencement of work not yet authorised.
‡ Of this 5·82 miles, Secunderabad to Hyderabad, are of mixed (5′ 6″ and 3′ 3½″) gauge.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 8}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*contd.***

8 (*a*) Nizam's Guaranteed State railway proper (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The first 47 miles from Wadi are laid with 75 lb. bull-headed steel rails on cast iron pot sleepers; and the following 9 miles with 68 lb. double-headed steel rails on pot sleepers. The remainder of the line is laid with 66½ lb. flat-footed steel rails on steel pea-pod sleepers with the exception of the mixed (5′ 6″ and 3′ 3½″) gauge line from Secunderaba to Hyderabad which has wooden sleepers under the same section of rail.

Ballast.—The line is ballasted throughout.

Fencing.—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station yards are fenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract:—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon) His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land also was provided free of charge.

Currency of contract.—The contract is current for a period of 99 years, and on expiry by effluxion of time, the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working.—From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity, paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity, and sums owing to the Nizam's Government and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance, one-half will be paid to the Nizam's Government, the remaining moiety being made over to the Company.

Rates and fares.—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares which were in existence on the Great Indian Peninsula railway at the time the contract was made.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Table II.* Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	1,16,46,997	6,94,401	89,925	0·77		87·01
1880	1,21,90,870	7,02,716	2,48,604	2·04	110	68 08
1881	1,22,85,291	7,56,834	2,88,666	2·35	112	61·32
1882	1,22,27,794	8,59,418	3,75,099	3·07	120	56·35
1883	1,22,83,560	8,53,521	2,37,932	1·94	141	72.12
					137	
1884	1,23,08,720	9,72,917	4,70,227	3·82		63·02
1885	2,05,60,998	11,13,950	4,87,024	2·37	155	56·26
1886	2,71,49,342	13,81,077	6,94,524	2·56	178	49·71
1887	2,69,71,143	15,48,891	5,52,905	2·05	143	64·31
1888	3,55,11,854	17,76,075	7,57,467	2·13	148	57·35
					118	
1889	3,59,46,922	22,57,462	7,72,513	2·15		66·90
1890	3,77,11,194	25,07,268	10,39,590	2·76	129	59·74
1891	3,95,18,791	27,76,437	12,57,860	3·18	140	54·70
1892	3,95,48,395	27,80,642	13,24,959	3.35	151	52·35
1893	4,01,96,909	30,61,605	14,36,451	3·57	151	53·08
					136	
1894	4,02,33,826	32,56,885	16,22,028	4·03		50·20
1895	4,06,43,818	32,15,541	15,77,149	3·88	177	53·77
1896	4,08,24,737	33,03,522	17,28,196	4·24	185	50·02
1897	4,09,60,944	36,10,354	19,38,769	4·73	187	48 67
1898	4,10,54,449	39,07,612	22,74,530	5·54	205	44·20
					221	
1899	4,15,68,731	41,10,201	25,01,046	6·02		43·45
1900	4,17,49,124	49,12,056	284,1,985	6·81	240	41·52
1901	4,24,30,543	40,77,927	26,48,120	6·24	286	35·59
1902	4,28,89,527	44,06,494	26,82,533	6·25	236	39·80
1903	4,30,13,663	43,18,630	25,38,386	5·90	254	41·79
					251	

* Includes the Bezwada extension railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Mainhead 8}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*contd.***

8 (*b*) Bezwada Extension railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Hyderabad frontier to Bezwada	26-11-86	10-2-89	20·58	20·58

Details of construction—

Permanent-way.—The line is laid with 66½lb. flat-footed steel rails on steel pen-pod sleepers.
Ballast.—The line is ballasted throughout.
Fencing.—The line is fenced only at stations.
Curves.—There are no curves with a radius of less than 1,000 feet.
Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The revised agreement for working this railway is under consideration.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	TABLE II. Earnings per mile per week.	Pro ; of exp ; to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1887	8,11,654	...	...	...	16,363	—16,363		
1888	11,56,237	...	...	...	39,357	—39,357		
1889	13,46,302	76,671	16,326	1·21	53,530	—37,204		
1890	13,90,830	74,731	16,318	1·17	54,530	—38,212		
1891	14,11,077	87,367	28,699	2·03	56,266	—27,567		
1892	14,17,674	98,779	28,347	2·00	56,584	—28,237	Included with the Nizam's Guaranteed State railway proper.	
1893	14,21,456	1,08,386	33,972	2·39	56,888	—22,916		
1894	14,26,901	1,71,016	71,270	5·00	57,122	+14,148		
1895	* 14,31,642	95,119	95,119	6·64	57,239	+37,880		
1896	14,95,588	73,057	38,496	2·68	57,406	—18,910		
1897	14,95,418	1,66,800	56,645	3·79	58,383	—1,738		
1898	15,01,343	1,69,061	95,390	6·35	59,569	+35,821		
1899	15,02,651	3,12,172	1,84,365	12·27	60,101	+1,24,264		
1900	15,02,618	3,56,446	2,38,989	15·90	60,106	+1,78,883		
1901	11,51,678	2,77,177	1,56,929	13·63	35,509	+1,21,420		
1902	11,60,425	2,89,663	1,40,329	12·08	46,375	+93,954		
1903	11,77,947	3,25,363	1,67,332	14·22	46,617	+1,20,715		

8 (*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Manmad to Jalna	12-1-97	21-10-99	109·36	391·42	1899	154
Jalna to Sailu		7-12-99	44·74		1900	385
Sailu to Purbhani		25-4-00	26·43		1901	391
Purbhani to Nanded		9-10-00	36·29		1902	391
Nanded to Sivungaon		25-8-00	16·68		1903	391
Sivungaon to Basar		25-4-00	33·89			
Basar to Secundrabad		25-4-00	113·21			
Secunderabad to Hyderabad		16-5-01	5·82*			
TOTAL		...	...			

Details of construction—

Permanent-way.—The permanent-wayt consists of 50 lb. flat-footed steel rails on steel and wooden sleepers.
Ballast.—The line is ballasted throughout.
Fencing.—The line is fenced only at stations.
Curves.—There are no curves with a radius of less than 1,000 feet.
Gradients.—The ruling gradient is 1 in 133·3.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

* Laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 8}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*concld.***

8. (*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the contract are as follows :—

Terms of contract.—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition a sum of one per cent. per annum for 20 years towards sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway, and after the expiration of the guaranteed period the interest payable thereon a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is also provided for.

Currency of contract.—On expiry of the contract by effluxion of time, the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period, to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government, the remaining moiety being dealt with as above.

Rates and fares.—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway.

Statistics of working—

Table I. Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	3,74,350	...	...	...	...	...
1897	17,64,352	...	...	...	...	...
1898	86,55,416	...	...	...	...	...
1899	2,00,21,971	63,331	36,877	0·18	48	41·82
1900	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	2,44,37,419	20,10,033	9,23,300	3·77	99	54·07
1902	2,57,75,220	22,88,043	9,67,892	3·76	112	57·70
1903	2,62,07,241	22,14,752	8,86,291	3·38	109	59·98

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—**

Lines comprising system.—The North Western State railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) North Western State railway (5′ 6″ gauge)	3,123·76	247·50	3,371·26
(*b*) Jammu and Kashmir (Native state section), (5′ 6″ gauge)	15·92	...	15·92
(*c*) Ludhiana-Dhuri Jakhal railway (5′ 6″ gauge)	78·66	...	78·66
(*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)	107 05	...	107·05
(*e*) Southern Punjab railway (5′ 6″ gauge)	425·33	156·40	581·73
(*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)	91·73	...	91·73
(*g*) Nowshera-Durgai railway (2′ 6″ gauge)	40·25	...	40·25
(*h*) Dandot Light railway (2′ 0″ gauge)	6·18	...	6·18
(*i*) *Jullundur-Kapurthalla-Sultanpur (British section)* *	...	6·80	6·80
(*j*) *Jullundur-Kapurthalla-Sultanpur (Native state section)* *	...	22·02	22·02
Total	3,888·88	492·72	4,321·60

Running powers—

	Miles.
Home line over foreign line :—	
East Indian railway, Ghaziabad to Delhi.	13·00

The first period of the contract with the Sind, Punjab and Delhi Railway Company having expired, the State assumed charge of the Undertaking on the 1st January 1886 and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the southern section of the Sind-Pishin State railways to be worked as one Imperial system under the name of the North Western State railway. The completion and opening, on the 24th May 1883, of the Attock bridge supplied the last link in a continuous chain of railway communication from Calcutta to Peshawar, a distance of 1,55[illegible] miles.

* Question of gauge not yet finally settled.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 9}}{\text{Sub-heads (a) to (j)}}$. NORTH WESTERN STATE RAILWAY SYSTEM—*contd.*

The Wazirabad-Lyallpur branch was constructed to open up the country now being irrigated by the Chenab canal, and recently brought under cultivation by the colonists and settlers, who are reclaiming the desert land of the Rechna Doab.

The Kotri-Rohri chord was constructed owing to the set of the Indus on the right bank which rendered the line along that bank dangerous, and, owing to the frequent breaches, caused communication with Karachi to be intermittent, dislocating the export trade and cutting off communication with the North Western Frontier. The present line, which follows the left bank of the river, is on high ground and is less liable to inundation. It saves about 36·51 miles on the through distance from the Punjab to Karachi, and also gives an alternative route to Quetta.

The line from the Bolan Junction station and from the Sibi station follows the old Quetta loop to Nari Bank station 4·81 miles from Sibi and 453 miles from Karachi. The old Bolan railway (Quetta loop) from Nari Bank *vid* Kundalani to Hirok has been dismantled, except the first portion from Nari bank to Rindli. The new line is on a completely new alignment between Nari bank and Kolpur, the actual length of the construction works being 57 miles.

9 (*a*) North Western State railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Commercial section—						
Main line—			Miles.	Miles.		Miles.
Ghaziabad to Meerut City	1864	18-4-67	27·38		1861	110
Meerut City to Umballa Cantonment		1-1-69	121·02		1862	142
Umballa Cantonment to Ludhiana		12-10-69	70·66		1863	142
Ludhiana to Phillour		15-10-70	8·28		1864	142
Phillour to Jullundur Cantonment		1-4-70	24·12		1865	350
Jullundur Cantonment to Beas		15-11-69	25·53		1866	350
Beas to Amritsar		1-11-67	26·20		1867	403
Amritsar to Lahore	8-2-59	10-4-62	32·30		1868	403
Lahore to Jhelum	22-10-69	6-10-78	103·12		1869	621
Jhelum to Rawalpindi	17-9-77	...	76·38		1870	663
Rawalpindi to Haji Shah	3-10-79	1-1-81	61·62		1871	663
Haji Shah to Attock bridge		1-5-81			1872	663
Attock bridge to Khairabad		31-5-83	2·38		1873	663
Khairabad to Peshawar City		1-5-82	41·25		1874	668
Peshawar City to Peshawar Cantonment		1-1-83	2·65		1875	725
Lahore to Mooltan Cantonment	8-2-59	24-4-65	207·82		1876	767
Mooltan Cantonment to Muzaffarabad	8-1-71	21-3-70	6·89		1877	767
Muzaffarabad to Khanpur		1-7-78	139·14		1878	1,268
Khanpur to Rohri		1-7-78	132·05		1879	1,268
Rohri to Sukkur	...	27-3-89	2·64		1880	1,541
Sukkur to Radhan	4-11-72	1-10-78	79·31		1881	1,671
Radhan to Laki		27-10-78	70·57		1882	1,732
Laki to Kotri		8-10-78	75·48		1883	1,759
Kotri to Karachi City	29-4-58	13-5-61	104·89		1884	1,850
Karachi City to Kiamari (including Napier Mole line).	...	16-6-89	3·07		1885	1,857
Total Main line, Commercial section, carried over.			...	1,441·70		

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7, and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (j)}}$, **NORTH WESTERN STATE RAILWAY SYSTEM**—*contd.*

9 (*a*) North Western State railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Brought forward, total main line, Commercial section	...	...	...	1,444·70	1886	1,857*
COMMERCIAL SECTION—*concld.*					1887	2,398
Branches—						
Sialkot Branch—					1888	2,432
Wazirabad to Sialkot	10-4-83	1-1-84	26·50		1889	2,421
Wazirabad-Lyallpur Branch—						
Wazirabad to Hafizabad	...	15-8-95	37·27		1890	2,442
Hafizabad to Sangla Hill	...	1-1-96	31·45		1891	‡2,356
Sangla Hill to Lyallpur	...	15-2-96	27·21		1892	2,427
Lyallpur to Toba Tek Singh	...	22-6-99	49·00		1893	2,427
Toba Tek Singh to Khanewal	...	16-4-00	55·53		1894	2,429
			200·56		1895	2,471
Kashmir Branch—						
Sialkot to the frontier of the Kashmir State	...	15-3-90	9·08		1896	2,708
Puranadera branch—					1897	2,811
Phalji to Puranadera	...	1-6-82	2·57		1898	2,812
Phulji branch extension	...	31-3-02	0·34		1899	2,923
			2·91		1900	3,000
Sukkur Bandar branch—						
Sukkur to Sukkur Bandar	...	1-10-78	1·25		1901	3,071
Kotri Bandar branch—						
Kotri to Kotri Bandar	...	1-4-89	1·14		1902	3,078
Meean Meer chord branch—						
Meean Meer East to Meean Meer Wes	...	10-12-91	*2·13		1903	3,124
Kotri-Rohri (chord) branch—						
Kotri to Hyderabad	...	25-5-00	4·99			
Hyderabad to Rahoki	...	28-3-01	6·04			
Rahoki to Shahdadpur	...	15-11-96	39·09			
Shahdadpur to Rohri	...	15-11-96	139·84			
			189·96			
Ferozepore branch—						
Raewind to Kasur	9-11-82	15-4-83	16·50			
Kasur to Ganda Singhwala		10-6-83	7·00			
Ganda Singhwala to Ganda Singh Bandar	2-10-83	15-12-83	5·50			
Ganda Singh Bandar to Hussainiwala	...	8-5-87				
Hussainiwala to Ferozepore City	...	1-10-92	2·00			
Ferozepore City to Ferozepore Cantonment	29-10-81	1-10-88	2·00			
Ferozepore Cantonment to Bhatinda	...	15-6-99	†54·36			
Hussainiwala to Ferozepore Cantonment	...	8-5-87	*3·50			
			90·86			
Pathankot branch—						
Amritsar to Dinanagar	6-12-81	1-1-84	51·22			
Dinanagar to Pathankot		8-6-84	15·48			
			66·70			
Jech Doab section—						
Malakwal to Sargodha	26-11-01	1-4-03	46·25			
Total Branches	...	...	...	637·34		
TOTAL OPEN MILEAGE (COMMERCIAL SECTION), CARRIED OVER	...	...	...	2,082·04		

* This is a military line and is not intended to be used for ordinary public traffic.
† Includes 26·28 miles of mixed gauge between Kot Kapura and Bhatinda.
‡ The decrease is due to the exclusion of the old Quetta loop, 90¼ miles, which was under reconstruction.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head (9)}}{\text{Sub-heads (a) to (j)}}$ **NORTH WESTERN STATE RAILWAY SYSTEM**—*contd.*

2 (a) North Western State railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward, total open mileage, Commercial section	...	...	...	2,082·04
FRONTIER SECTION (MILITARY)—				
Main line—				
Sind-Sagar—				
Lala Musa to Baha-ud-din	24-7-77	*1-1-80	28·46	
Baha-ud-din to Hariah		*1-2-80	10·52	
Hariah to Malakwal		*10-4-80	5·99	
Malakwal to Bhakkar	...	15-8-87	175·04	
Bhakkar to Chenab west bank	...	22-1-87	119·71	
Chenab west bank to Chenab east bank	...	1-2-90	2·49	
Chenab east bank to Sher Shah	....	1-1-89	2·39	
Total Main line	...	...	...	344·60
Branches—				
Khushalgarh branch—				
Golra Junction to Langar	Sep 1879	1-4-81	60·50	
Langar to Khushalgarh		16-4-81	9·66	
Khushalgarh, new station		18-7-83		
			70·16	
Bhera branch—				
Malakwal to Miani	24-7-77	*10-4-80	8·99	
Miani to Bhera	25-10-81	*3-2-82	9·11	
			18·10	
Bhaganwalah branch—				
Haranpur to Bhaganwala	...	...	10·84	
Khewra branch—				
Chalisa Junction to Khewra salt mines	...	*1-1-83	6·36	
Khewra to Dandot	...		2·15	
			8·51	
Mari branch—				
Kundian to Mari	Kundian to Mianwali, 27-2-86	15-3-92	36·32	
Dera Ghazi Khan branch—				
Mahmud Kot to Ghazighat	...	1-4-87	11·27	
Mari-Attock branch—				
Cambellpore Cantonment (new station) to Basal Junction.	...	1-4-99	18·45	
Jand Junction to Daud Khel	...	1-4-99	53·91	
			72·36	
Total Branches	...	...	...	227·56
TOTAL OPEN MILEAGE, SIND-SAGAR, MILITARY SECTION	...	...	...	572·16
Sind-Pishin—				
Ruk to Sibi	Oct. 1879	2-5-90	132·26	
Sibi to Sharigh	...	20-3-87	74·80	
Sharigh to Bostan	...	28-8-87	61·13	
Base of Bostan triangle loop	...	...	0·31	
Bostan to Killa Abdulla.	...	25-1-88	38·14	
Killa Abdulla to Chaman	...	1-1-92	29·40	
TOTAL, SIND-PISHIN	...	...	...	336·04
Carried over, total open mileage — Military section	...	...	...	908·20
Carried over, total open mileage — Commercial section	...	...	...	2,082·04

* Dates of opening of original 3′ 3½″ gauge line, subsequently converted to and opened on the 5′ 6″ gauge line as follows: Lala Musa to Malakwal 10-2-86; Malakwal to Bhera, 15-3-87; Chalisa Junction to Khewra salt mines, 15-8-87; Khewra to Dandot, 1-8-89.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168]

Number $\frac{\text{Main-head 9}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (*a*) North Western State railway proper (5' 6" gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward, total open mileage { Commercial section	...	...	...	2,082·04
{ Frontier section (Military) (Sind-Sagar and Sind-Pishin)	...	...	...	208·20
FRONTIER SECTION (MILITARY)—*concld.*				
Mushkaf-Bolan—				
Sibi (Point No. 51) to Quetta south distant signal	...	15-4-97	86·74	
Quetta loop—				
Quetta south distant signal to Bostan	...	28-8-87	20·59	
Nari bank to Bindli	...	...	13·81	
Mithri chord	...	1-1-98	1·34	
			35·74	
TOTAL, MUSHKAF-BOLAN	...	...	...	122·48
Peshawar-Jamrud branch—				
Peshawar to Jamrud	...	1-1-01	11·04	11·04
TOTAL OPEN MILEAGE, FRONTIER SECTION (MILITARY)	...	...	...	1,041·72
GRAND TOTAL, NORTH WESTERN (COMMERCIAL AND MILITARY)	...	...	...	3,123·76
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Jech-Doab section—				
Sargodha to Shorkot Road	23-9-03	...	103·00	
Quetta-Nushki section—				
From a point 12 miles south of Quetta to Nushki	6-8-02	..	82·50	
Hyderabad-Badin section—				
Hyderabad to Badin	15-5-03	...	62·00	
TOTAL MILES UNDER CONSTRUCTION	...	...	...	247·50
GRAND TOTAL, NORTH WESTERN STATE RAILWAY PROPER	...	...	...	3,371·26
DOUBLE LINE (COMMERCIAL AND MILITARY SECTIONS)—				
Kiamari to Karachi City	...	30-6-97	3·06	
Karachi City to Karachi Cantonment	...	13-5-61	2·30	
Karachi Cantonment to Pipri	...	20-6-97	20·75	
Pipri to Kotri	...	3-5-98	81·89	
Mecan Meer East to Mecan Meer West	...	10-12-91	2·13	
Gulistan to Chaman	...	20-9-92	36·82	
Ab-i-Gum to Kolpur	...	20-9-92	23·54	
TOTAL DOUBLE LINE	...	...	170·49	

Details of construction—

Permanent-way.—The permanent-way is of various types. On the single line, of iron rails, there are 105·33 miles, 60 lb. flat-footed; 71·45 miles, 68 lb. double-headed; 29·40 miles, 60 lb. bull-headed; 10·65 miles, 82 lb. double-headed and 3·50 miles, 68 lb bull-headed. Of steel rails, there are 46·25 miles, 61½ lb. flat-footed; 3·36 miles, 70 lb. flat-footed; 389·39 miles, 62 lb. flat-footed; 1883·40 miles, 75lb. flat-footed; 8·25 miles, 64lb. double-headed, 80·55 miles, 68 lb. double-headed; 92·76 miles, 75 lb. double-headed; 182·57 miles, 68 lb. bull-headed; 42·94 miles, 84 lb. bull-headed; 23·55 miles, 100 lb. flat-footed; 44·12 miles, 77½ lb. bull-headed and 108·89 miles, 73 lb. bull-headed. On the double line, of iron rails, there are 2·13 miles, 68lb. double-headed. Of steel rails there are 0·50 mile, 68 lb. double-headed; 141·88 miles, 75 lb. flat-footed; 3·15 miles, 77½ lb. bull-headed and 23·54 miles 100 lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand and broken stone.

Tunnels.—See Appendix 37.

Bridges.—See Appendix 36.

Fencing.—The main line, Ferozepore and Pathankot branches, are fenced on both sides with the exception of the section from Lala Musa to Peshawar which is only partially fenced. The Wazirabad and Khushalgarh branches are unfenced, except at stations. The Sind-Sagar railway is unfenced, except on the portion from Sher Shah to Chenab west bank. The Kundian-Mianwali branch is unfenced throughout. The Sind-Pishin main line is fenced from Ruk Junction to Jhatpat; the remainder of the line is unfenced. The Mushkaf-Bolan line, the Chaman extension and the Jech-Doab section, from Malakwal to Sargodha, are unfenced.

Curves.—There are several curves with a radius of less than 1,000 feet, on the hill sections their radii varying from 477 feet to 955 feet.

Gradients.—The ruling gradient between Kotri and Rohri, Sibi and Ruk and Raewind and Bhatinda, is 1 in 500; between Ghaziabad and Lala Musa, Kotri and Lahore, Lyallpur and Khanewal and Malakwal and Sargodha, 1 in 400; between Karachi and Kotri, 1 in 189; between Lala Musa and Peshawar, 1 in 100; between Peshawar and Jamrud, 1 in 90; between Golra and Jand, 1 in 70 and between Jand and Khushalgarh, 1 in 50. The gradients on the Sind Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are, 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts—

The line is owned and worked by the State.

*This is a Military line and is not intended to be used for ordinary public traffic.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9.}}{\text{Sub-heads (a) to (i)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM**—*contd.*

9 (*a*) North Western State railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	21,67,64,247	1,51,27,621	55,36,870	2·55	1,00,29,015	...	...	−44,92,145
1880	25,05,35,401	1,00,30,666	75,55,561	3·02	1,11,36,919	...	21,122	−36,02,480
1881	26,38,29,896	90,04,725	46,13,547	1·75	1,17,64,868	...	...	−71,51,301
1882	27,49,44,870	82,43,072	57,96,011	2·11	1,05,83,712	...	...	−47,87,701
1883	28,18,15,806	1,03,81,148	87,19,243	3·09	1,07,43,931	...	...	−21,24,688
1884	29,20,27,775	1,07,68,748	88,21,631	3·02	1,18,26,701	...	...	−30,05,070
1885	31,69,43,458	1,49,78,983	1,37,41,127	4·34	1,64,88,697	...	1,25,953	−28,80,523
1886	33,88,68,533	2,53,60,901	1,19,02,839	3·54	1,14,07,148	53,00,733	...	−47,15,042
1887	36,16,43,700	2,10,03,388	57,77,595	1·60	1,01,56,779	28,80,322	...	−1,24,59,516
1888	37,50,58,528	2,57,79,305	83,66,598	2·23	1,09,19,098	89,45,756	...	−1,08,98,606
1889	38,73,09,431	2,82,06,820	1,02,84,741	2·66	1,13,76,516	83,98,768	...	−94,90,543
1890	41,54,67,150	2,73,99,035	1,02,57,601	2·47	1,16,66,585	74,54,323	...	−88,63,307
1891	41,97,30,971	3,25,78,355	1,21,32,521	2·90	1,20,67,542	80,05,299	...	−79,40,321
1892	42,71,90,670	3,64,35,665	94,50,960	2·21	1,24,26,030	89,94,076	...	−1,19,69,146
1893	43,71,03,591	2,92,88,732	97,97,643	2·24	1,27,61,682	90,98,545	...	−1,20,62,584
1894	44,76,05,925	3,23,14,097	1,28,25,181	2·86	1,24,63,279	1,03,59,245	...	−99,97,343
1895	46,38,14,462	3,52,18,382	1,64,46,998	3·55	1,35,91,193	1,03,17,385	...	−73,71,580
1896	47,91,80,892	2,94,41,749	1,18,86,409	2·49	1,42,35,427	96,43,588	...	−1,19,92,606
1897	48,79,25,286	3,29,93,448	1,49,78,897	3·07	1,45,85,298	90,50,191	...	−86,56,592
1898	49,37,11,919	3,76,01,912	1,85,74,360	3·76	1,50,41,459	86,35,849	...	−51,02,948
1899	50,01,64,031	3,52,21,759	1,60,89,223	3·22	1,50,40,208	85,61,406	...	−75,12,384
1900	50,57,26,113	3,15,22,237	1,32,19,151	2·61	1,54,25,164	85,76,682	...	−1,07,82,695
1901	51,04,27,448	4,11,89,277	2,03,56,471	3·99	1,55,50,694	86,02,222	...	−37,96,445
1902	52,53,16,084	4,22,19,927	1,73,70,094	3·31	1,59,69,560	85,81,455	...	−71,80,921
1903	53,31,86,831	4,93,83,876	2,50,03,517	4·69	1,62,88,103	85,77,490	...	+1,42,981

TABLE II.

Calendar year.	Sind-Punjab and Delhi, 5′ 6″		Punjab-Northern, 5′ 6″		Indus Valley and Kandahar, 5′ 6″		Amritsar Pathankot, 5′ 6″		*North Western State.* Commercial section		Military section.		Entire line.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1861	58	97·28	...	...	...	...	...	...	...	...	...	...	...	...
1862	112	79·59	...	...	...	...	...	...	...	...	...	...	...	...
1863	171	83·04	...	...	...	...	...	...	...	...	...	...	...	...
1864	170	87·26	...	...	...	...	...	...	...	...	...	...	...	...
1865	191	82·18	...	...	...	...	...	...	...	...	...	...	...	...
1866	116	76·15	...	...	...	...	...	...	...	...	...	...	...	...
1867	123	89·98	...	...	...	...	...	...	...	...	...	...	...	...
1868	112	95·69	...	...	...	...	...	...	...	...	...	...	...	...
1869	117	89·70	...	...	...	...	...	...	...	...	...	...	...	...
1870	140	76·16	...	...	...	...	...	...	...	...	...	...	...	...
1871	122	99·09	...	...	...	...	...	...	...	...	...	...	...	...
1872	134	85·77	...	...	...	...	...	...	...	...	...	...	...	...
1873	154	68·67	...	...	...	...	...	...	...	...	...	...	...	...
1874	191	55·35	...	...	...	...	...	...	...	...	...	...	...	...
1875	161	64·09	61	63·41	...	...	...	...	...	...	...	...	...	...
1876	186	67·03	101	77·27	...	...	...	...	...	...	...	...	...	...
1877	241	57·46	130	86·81	...	...	...	...	...	...	...	...	...	...
1878	234	64·50	169	99·36	56	122·97	...	...	...	...	...	...	...	...
1879	317	60·22	245	79·52	121	81·16	...	...	...	...	...	...	...	...
1880	353	55·92	360	88·25	209	71·35	...	...	...	...	...	...	...	...
1881	285	69·76	198	89·64	155	78·73	...	...	...	...	...	...	...	...
1882	285	66·00	151	88·74	141	69·17	...	...	...	...	...	...	...	...
1883	296	57·13	144	81·11	203	55·55	...	...	...	...	...	...	...	...
1884	290	61·26	139	72·84	210	69·40	67	85·78	...	...	...	...	...	...
1885	373	57·35	165	62·69	309	40·85	84	80·28	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	259	52·71
1887	...	...	...	...	...	...	...	...	...	...	...	...	182	72·73
1888	...	...	...	...	...	...	...	...	...	...	...	...	202	67·77
1889	...	...	...	...	...	...	...	...	236	57·01	80	107·75	236	65·76
1890	...	...	...	...	...	...	...	...	283	54·48	88	110·72	219	62·82
1891	...	...	...	...	...	...	...	...	344	55·60	68	123·41	231	62·96
1892	...	...	...	...	...	...	...	...	260	55·58	70	131·08	208	64·25
1893	...	...	...	...	...	...	...	...	313	60·20	75	118·83	229	66·53
1894	...	...	...	...	...	...	...	...	347	53·11	54	122·95	253	60·31
1895	...	...	...	...	...	...	...	...	379	46·79	77	116·14	274	53·30
1896	...	...	...	...	...	...	...	...	292	54·77	78	97·77	220	59·63
1897	...	...	...	...	...	...	...	...	309	49·73	53	93·76	223	54·41
1898	...	...	...	...	...	...	...	...	401	45·98	67	101·26	225	50·61
1899	...	...	...	...	...	...	...	...	366	47·73	60	123·43	238	54·32
1900	...	...	...	...	...	...	...	...	275	52·34	60	103·47	201	56·02
1901	...	...	...	...	...	...	...	...	350	45·41	69	101·15	255	50·58
1902	...	...	...	...	...	...	...	...	360	53·63	67	112·42	262	59·62
1903	...	...	...	...	...	...	...	...	421	44·40	65	106·94	294	49·36

*This line which was originally constructed on the 3′ 3½″ gauge was converted to the 5′ 6″ gauge in 1878.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 9.}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (b) Jammu and Kashmir (Native state section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Frontier of the Kashmir state to the left bank of the Tawi river near Jammu	25-2-88	15-3-90	15·92	15·92

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with sand and broken stone.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 500.

Terms of contracts—

The railway is worked by the State under the following contracts :—

Contract of—14th July 1888 (between the Government of India and the Kashmir Darbar) for construction and working.

18th November 1890.—Supplementary agreement (between the Government of India and the Kashmir Darbar) relative to the provision of capital.

28th April 1898.—Memorandum of revised terms (between the Government of India and the Kashmir Darbar) for working.

The general conditions of the contracts are as follows :—

Government aid.—The line was constructed at the cost of the Kashmir Darbar.

Currency of contract.—Either party can revise the contract on giving six months' notice.

Terms of working.—The North Western State railway work and maintain the line, and supply rolling-stock, for 55·50 per cent. of the gross earnings (which include any single item of capital expenditure classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year.) The balance is paid to the Kashmir Darbar.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western State railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross receipts.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1888	29,545	...	...	...	...	...
1889	7,51,458	...	...	...	...	...
1890	12,37,071	45,667	13,770	1·11	†	†
1891	13,80,083	57,312	15,901	1·15	†	†
1892	9,45,302	54,005	15,444	1·63	†	†
1893	9,56,327	14,332	14,332	1·50	†	†
1894	9,59,773	17,556	17,556	1·83	†	†
1895	9,60,010	18,262	18,262	1·90	†	†
1896	9,60,011	31,321	31,321	3·26	†	†
1897	9,65,151	35,731	21,587	2·24	†	†
1898	9,62,846	48,164	21,433	2·23	58	55·50
1899	9,60,820	51,532	22,932	2·39	62	55·50
1900	9,60,492	55,215	24,571	2·56	67	55·50
1901	9,60,636	52,484	23,355	2·43	63	55·50
1902	9,62,471	51,865	23,080	2·40	63	55·50
1903	9,62,284	54,881	24,422	2·54	66	55·50

† Included with the North Western State railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (*c*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ludhiana *vid* Dhuri to Jakhal	6-10-99	10-4-01	78·66	78·66

Details of construction—

Permanent-way.—The permanent-way consists of 75lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with sand and broken stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Darbars) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—The line was constructed at the cost of the Maler Kotla and Jind Darbars.

Currency of contract.—The contract is terminable on the 31st December 1904, or on the 1st January or 1st July in any year thereafter, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western State railway will give to the Maler Kotla and Jind Darbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Darbars will indemnify the North Western State railway of all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses, the balance to be paid to the Maler Kotla and Jind Darbars to be divided between them in the proportion of $\frac{1}{5}$th and $\frac{4}{5}$ths, respectively.

Rates and fares.—Rates and fares as in force on the North Western State railway.

Statistics of working—

Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	43,10,407	2,02,297	91,634	2·11	63	55·00
1902	43,24,799	4,05,005	1,82,252	4·21	99	55·00
1903	*41,19,964	3,15,026	1,41,762	3·44	101	55·00

9. (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Rajpura to Patiala	7-12-83	1-11-84	15·77		1884 to 1888	16
Patiala to Bhatinda	April 1888	13-10-89	91·28		1889 to 1903	107
Total . .	...	...	...	107·05		

Details of construction—

Permanent-way.—The line from Rajpura to Patiala is laid with 68lb. steel rails on deodar sleepers and from Patiala to Bhatinda with 75lb. flat-footed steel rails on creosoted-pine and deodar sleepers.

Ballast.—The line is ballasted throughout with sand and broken stone.

Fencing.—The line is fenced from Rajpura to Patiala only.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 500.

* The decrease was due to credits.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion) 6, 7, and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (f)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is owned by the Patiala State and is worked by the North Western State railway under the following contract—

Contract of—30th January 1893 (between the Secretary of State and the Patiala Darbar) for maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The line has been constructed at the cost of the Patiala Darbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western State railway will give to the Patiala Darbar possession of the railway, works, surveys and stores; and, on this being done, the Patiala Darbar will indemnify the North Western State railway of all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.

Terms of working.—After deduction of 55 per cent. of the gross receipts of the Rajpura-Bhatinda railway for working expenses, the balance to be paid over to the Patiala Darbar.

Rates and fares.—Rates and fares as in force on the North Western State railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1884	14,12,259	5,111	—496	...	17	109·72
1885	12,29,141	48,769	—4,255	...	59	106·09
1886	12,29,141	64,623	13,816	1·12	79	78·62
1887	12,43,250	*	15,425	1·24	†	†
1888	22,61,990	*	18,640	0·82	†	†
1889	62,83,918	1,08,480	58,403	0·93	74	55·00
1890	64,00,534	5,66,946	2,55,126	3·99	101	55·00
1891	65,81,553	7,19,859	3,23,937	4·92	128	55·00
1892	66,41,382	5,64,053	2,53,824	3·82	100	55·00
1893	67,26,941	6,84,337	3,07,956	4·58	122	55·00
1894	67,01,669	12,59,032	5,66,565	8·45	224	55·00
1895	67,02,457	13,18,902	5,93,506	8·86	235	55·00
1896	66,95,813	9,97,826	4,49,022	6·71	178	55·00
1897	66,96,451	6,96,927	3,13,617	4·68	124	55·00
1898	67,04,520	7,20,637	3,16,187	4·72	125	55·00
1899	67,05,785	6,79,520	3,05,784	4·56	122	55·00
1900	67,05,785	6,93,804	3,12,211	4·66	125	55·00
1901	67,10,823	8,60,642	3,87,289	5·77	155	55·00
1902	67,12,977	8,40,947	3,78,426	5·64	151	55·00
1903	67,18,890	9,64,002	4,33,801	6·46	173	55·00

9 (*e*) Southern Punjab railway (5′ 6″ gauge)—

The railway runs from Delhi *viâ* Bhatinda to Samasata on the North Western State railway, shortening the distance by railway between Delhi and Karachi by 187 miles, as compared with the route *viâ* Umballa and Lahore.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Delhi *viâ* Bhatinda to Samasata	...	10-11-97	401·16		1897	400
Independant entrance from Delhi Brewery to Delhi	...	20-12-09	0·79		1898	400
					1899	424
Branch—					1900	424
Narwana to Kaithal	...	1-2-99	23·38		1901	424
					1902	425
TOTAL	...	...	...	425·33	1903	425
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Ludhiana to MacLeodganj	10-11-03	...	156·40	156·40		
GRAND TOTAL	...	...	...	581·73		

* Information not available.
† Included with the North Western State railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (*e*) Southern Punjab railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with sand and broken stone.

Fencing.—The line is fenced near all large towns only.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

Government aid.—Government allow the Company in respect of each half-year, by way of rebate on the net earnings of the North Western State railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western State railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western State railway) as together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual rupee expenditure charged in the capital account. Land was also provided free of cost to the Company.

Currency of contract.—Government may, by giving 12 months' notice, determine the contract on the 31st December 1919, or on the 31st December 1929 or 1939, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent. the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to work and maintain the line and provide rolling-stock, at 52 per cent. of the gross earnings. Surplus profits in excess of 3¾ per cent. per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western State railway take all receipts from Delhi and Samasata traffic with North Western State railway stations, and the Company also receives nothing on any other traffic passed over the Southern Punjab railway from or to North Western State railway stations, nor from traffic between foreign lines and the North Western State railway, provided that there is any other shorter route.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western State railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Rebate from N. W. S. Ry.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Pro : of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	21,49,441	...	...	...	...	...	...	...	...
1896	1,30,67,048	...	...	...	...	...	...	...	...
1897	1,99,08,812	1,61,038*	77,298	0·39	19,942	97,240	0·49	77	52·00
1898	2,23,62,921	16,28,254*	7,81,562	3·49	...	7,81,562	3·49	78	52·00
1899	2,26,68,262	16,11,010*	7,78,285	2·94	17,318	7,90,603	3·02	73	52·00
1900	2,26,57,063	16,31,550*	7,87,090	3·47	5,832	7,92,922	3·50	74	52·00
1901	2,25,70,734	24,57,481†	11,79,591	5·22	60,006	12,39,597	5·49	111	52·00
1902	2,27,93,660	19,41,541	9,31,940	4·09	...	9,31,940	4·09	88	52·00
1903	2,28,27,906	21,59,158	10,36,396	4·54	...	10,36,396	4·54	98	52·00

9 (*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Khushalgarh to Kohat	31-10-00	25-5-02	29·70		1902	30
Kohat to Thal	31-10-00	1-4-03	62·03		1903	92
Total	...	...	...	91·73		

* Includes credits in accordance with the award by Mr. C. A. Cripps, K.C.

† Excludes credits referred to in the foregoing note which were actually afforded in the year 1901.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 9}{\text{Sub-heads } (a) \text{ to } (j)}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*contd.***

9 (*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lb. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25 lb. and partly with 21 lb. rails, partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with sand and broken stone.

Fencing.—The line is unfenced.

Curves.—Of curves with a radius of less than 500 feet there are 1·2 miles distributed over the line, the radii varying from 239 to 471 feet.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83 and between Kohat and Thal, 1 in 100.

Terms of contracts—The line is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western State railway	1902	19	56·44
	1903	34	174·55

9 (*g*) Nowshera-Durgai railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Nowshera to Durgai	15-5-99	1-1-01	40·25	40·25

Details of construction—

Permanent-way.—The permanent-way consists of 35lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with sand and broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 477 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—The railway is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western State railway	1902	51	151·11
	1903	53	101·66

9. (*h*) Dandot Light railway (2′ 0″ gauge)—

The Dandot Light railway has been constructed by the North Western State railway to develop the Dandot colliery which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the Second portion (1·29 miles), there is another incline worked by gravity alone.

APPENDIX 38—*concld.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 9.}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN STATE RAILWAY SYSTEM—*concld.***

9 (*h*) Dondot Light (2′ 0″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Dandot station to the mouth of the main mine	...	5-7-89	1·89		1889 to 1892	2
Head of middle incline to shaft No. 10 of outcrop mine	...	1-7-93	1·29		1893	3
Head of upper incline to Pidh coal platform	...	6-6-95	3·00		1894	3
					1895 to 1903	6
TOTAL	...	...	...	6·18		

Details of construction—

Permanent-way.—The permanent-way consists of old metre gauge 36 lb. and 40 lb. rails laid on deodar sleepers.

Ballast.—The line is ballasted throughout with sand and broken stone.

Curves.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contracts.—The line is owned and worked by the State.

Statistics of Working—Included with the North Western State railway.

9 (*i*) Jullundur-Kapurthalla-Sultanpur (British section)*—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Jullundur to the British frontier	7-8-03	...	6·80	6·80

Commencement of work not yet authorised.

9 (*j*) Jullundur-Kapurthalla-Sultanpur (Native State section)*—

Progress in opening—

Name and section of railway	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sultanpur to the British frontier	7-8-03	...	22·02	22·02

Commencement of work not yet authorised.

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND STATE RAILWAY SYSTEM—**

Lines comprising system.—The Oudh and Rohilkhand State railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(*a*) Oudh and Rohilkhand State railway (5′ 6″ gauge)	1,101·19	124·62	1,225·81
(*b*) Hardwar-Dehra railway (5′ 6″ gauge)	32·04	...	32·04
(*c*) Cawnpore-Barhwal link (3′ 3¾″ gauge)	79·60	...	79·60
Total	1,212·83	124·62	1,337·45

Running powers—

	Miles.
Home line over Foreign lines :—	
Ghaziabad to Delhi, East Indian railway	13·00
Daliganj to Aishbagh, Rohilkund and Kumaon (Lucknow-Bareilly section)	3·66
	16·66
Foreign line over Home line :—	
Indian Midland railway, at Cawnpore	0·86
" " " " Cawnpore to Lucknow	44·63
	45·49

* Question of gauge not yet finally settled.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 27 / Sub-heads (*a*) to (*c*) **OUDH AND ROHILKHAND STATE RAILWAY SYSTEM—*contd.***

10 (*a*) Oudh and Rohilkhand State railway proper (5′ 6″ gauge)—*contd.*

The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand State railway. This tramway is 3·25 miles long and is worked by manual power. It is used for goods traffic only.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Moghal Sarai to Bechanpur	11-5-01	*31-10-02	1·31		1867	42
Bechanpur to mile 3·25	...	22-12-62	2·14		1868	42
From mile 3·25, south of the Dufferin bridge, to Kashi (Benares Ganges) station	...	1-10-87	4·25		1869	42
From Kashi (Benares Ganges) station to Benares Cantonment	...	18-6-83	1·50		1870	42
Benares Cantonment to Rae Bareli	Oct. 1895	4-4-98	138·36		1871	42
Rae Bareli to Lucknow	5-8-91	18-10-93	48·56		1872	293
Lucknow to Sandila	...	1-2-72	30·00		1873	456
Sandila to Hardoi	...	15-7-72	33·00		1874	540
Hardoi to Shahjahanpur	...	1-3-73	39·00		1875	544
Shahjahanpur to Faridpur	...	8-9-73	32·00		1876	544
Faridpur to Bareilly	...	1-11-73	13·00		1877	544
Bareilly to Moradabad (chord line *vid* Rampur)	4-12-91	3-6-94	56·07		1878	547
Moradabad to Nagina	29-8-81	8-10-84	47·25		1879	547
Nagina to Najibabad		1-4-85	13·70		1880	547
Najibabad to Saharanpur		1-1-86	58·25		1881	547
Benares-Lucknow loop—			518·49			
Benares Cantonment to Shahganj	...	5-1-74	56·03		1882	547
Shahganj to Bilwai	...	1-5-74	7·00		1883	548
Bilwai to Malipur	...	17-4-74	9·00		1884	595
Malipur to Akbarpur	...	2-3-74	12·00		1885	607
Akbarpur to Fyzabad	...	10-6-73	36·00			
Fyzabad to Bara Banki	...	25-11-72	62·00		1886	686
Bara Banki to Lucknow	...	1-1-72	17·00		1887	692
Bareilly-Moradabad loop—			199·03			
Bareilly to Ukka	...	22-12-73	5·60		1888	692
Ukka to Aonla	...	1-11-73	11·00		1889	692
Aonla to Chandausi	...	10-6-73	27·00		1890	692
Chandausi to Moradabad	...	28-10-72	27·50		1891	692
			70·50		1892	692
					1893	741
Total Main and Loop lines	...	...	...	788·02	1894	797
Branches on main line—					1895	797
Cawnpore branch—					1896	812
Lucknow to Cawnpore	Jany. 1864	23-4-67	42·00		1897	812
Left bank Ganges to junction with the East Indian railway at Cawnpore	...	15-7-75	†3·22		1898	950
Passenger approach to the East Indian railway at Cawnpore	...	21-2-88	0·23		1899	950
			45·45		1900	1,037
Madhoganj branch—					1901	1,037
Balamau to Madhoganj	15-8-02	20-12-03	14·50		1902	1,039
Ghaziabad branch—					1903	1,101
Moradabad to Gajroula	8-4-97	1-4-00	33·40			
Gajroula to Ghaziabad		25-11-00	53·37			
			86·77			
Kotdwara branch—						
Najibabad Junction to the right bank of the Koh river opposite Kotdwara	Oct. 1895	24-12-96	15·19			
Hardwar branch—						
Lhaksar Junction to the left bank of the Ganges Canal near Jawalapur	15-5-83	1-1-86	13·53			
Left bank of the Ganges Canal near Jawalapur to Hardwar		20-8-86	3·53			
			17·06			
Branches on Benares-Lucknow loop—						
Ajodhya Ghat branch—						
Kanupali to Ajodhya Ghat	16-12-84	15-11-86	3·22			
Allahabad branch—						
Sultanpur to Chilbila‡	8-11-01	10-4-03	22·07			
Partabgarh to Siwait		20-3-03	24·98			
			47·05			
Bahramghat branch—						
Bara Banki to Bahramghat	...	20-11-72	§21·52			
Branches on the Bareilly-Moradabad loop—						
Aligarh branch—						
Chandausi to Rajghat	...	28-10-72	30·48			
Rajghat to Aligarh	...	1-2-72	30·12			
			60·60			
Benares City branch—						
Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western) (*3′ 3⅜″ gauge*)	...	1-4-99	1·81			
Total Branches	...	...	...	313·17		
TOTAL OPEN MILEAGE, OUDH AND ROHILKHAND STATE RAILWAY PROPER, CARRIED OVER	...	...	...	1,101·19		

* This is the date of the new alignment, the date of the old alignment (1·11 miles) was 22nd December 1862.
† Of this 0·59 mile on the Cawnpore bridge is mixed (5′ 6″ and 3′ 3⅜″) gauge.
‡ Excluding 2·45 miles (Partabgrah to Chilbila), existing line of the Oudh and Rohilkhand State railway.
§ Of this the length from Burhwal to Bara Banki, 16·79 miles, is mixed (5′ 6″ and 3′ 3⅜″) gauge.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 10 / Sub-heads (*a*) to (*c*). **OUDH AND ROHILKHAND STATE RAILWAY SYSTEM—*contd.***

10. (*a*) Oudh and Rohilkhand State railway proper (5′ 6″ gauge)—*concld.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Total open mileage, brought forward	...	...	...	1,101·19
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION				
Allahabad branch—				
Fyzabad to Sultanpur	8-11-01	1-2-04	36·37	
Siwait to Phaphamau		20-1-04	3·63	
Phaphamau to Allahabad		*31-3-05	7·62	
Zafarabad branch—				
Phaphamau to Zafarabad	2-10-03	...	57·50	
Meerut branch—				
Hapur to Meerut	3-4-03	...	19·50	
			124·62	
Total lines under construction	...	...	...	124·62
GRAND TOTAL, OUDH AND ROHILKHAND STATE RAILWAY PROPER	...	...	...	1,225·81

Details of construction—

Permanent-way.—The permanent-way at first adopted consisted of 60 lb. iron rail, laid partly on cast iron oval bowl, and partly on wrought-iron saddle-back sleepers. Up to 1889, the original iron rails had been replaced by 60 lb. steel rails; since 1889, all renewals have been made with 75 lb. steel rails of the Indian State railway pattern, laid on metal or wooden sleepers, the former being steel bowls or cast-iron bowls made locally, and the latter sal and deodar. All new lines are laid with 75 lb. steel rails on cast-iron pot or wooden sleepers.

Ballast.—The system is ballasted throughout, either with sand or earth with a covering of broken brick or of kunkur, or with kunkur, stone, or shingle.

Bridges.—See Appendix 36.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The Oudh and Rohilkhand State railway is owned and worked by the State.

Statistics of working.—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest	Surplus profits paid to Company.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1867	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...
1871	...	...	...	...	...	...	...
1872	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...
1875	...	...	...	...	...	...	...
1876	...	...	...	...	...	...	...
1877	...	...	...	...	...	...	...
1878	...	...	...	...	...	...	...
1879	5,80,35,764	43,44,843	18,19,936	3·14	28,00,000	...	−9,80,064
1880	6,02,24,681	44,55,150	19,04,409	3·16	28,19,946	...	−9,15,537
1881	6,25,30,935	49,28,730	19,75,699	3·16	29,14,137	...	−9,38,438
1882	6,52,79,840	52,62,844	18,01,871	2·76	30,67,622	...	−12,66,251
1883	7,07,69,446	54,56,255	24,80,362	3·50	31,35,495	...	−6,55,133
1884	7,91,43,383	52,75,198	23,26,146	2·94	41,14,587	...	−17,88,441
1885	8,54,34,426	55,37,369	17,95,361	2·10	46,53,333	...	−28,57,972
1886	8,95,12,775	65,05,408	28,60,755	3·20	51,88,014	...	−23,27,259
1887	9,17,06,668	66,46,213	31,35,249	3·42	53,98,339	...	−22,63,090
1888	9,18,41,649	70,77,053	30,16,005	3·28	51,67,494	...	−21,51,489
1889	9,22,32,226	75,39,683	42,04,076	4·56	49,71,898	...	−7,67,822
1890	9,27,89,280	73,81,396	37,54,478	4·05	44,23,109	...	−6,68,631
1891	9,28,38,358	85,64,209	49,42,458	5·32	47,25,666	...	+2,16,792
1892	10,34,95,085	85,42,886	50,16,329	4·84	52,79,411	...	−2,63,082
1893	10,09,17,292	87,15,926	50,17,053	4·97	55,01,058	...	−4,84,005
1894	10,28,87,184	1,05,18,886	57,36,188	5·58	63,11,123	...	−5,74,985
1895	10,65,05,148	1,02,94,880	52,55,948	4·93	63,69,949	...	−11,14,001
1896	10,92,69,435	36,97,076	43,50,907	3·98	61,30,729	...	−17,79,822
1897	11,44,19,239	85,15,856	36,96,778	3·23	59,77,486	...	−22,80,708
1898	11,64,90,213	98,51,599	53,07,727	4·56	58,76,247	...	−5,68,520
1899	12,21,84,423	1,11,38,990	60,76,595	4·97	59,75,202	...	+1,01,393
1900	12,55,94,869	1,15,15,132	55,91,727	4·45	62,28,185	...	−6,36,458
1901	12,88,66,865	1,32,54,991	72,20,007	5·60	63,12,044	...	+9,07,963
1902	13,65,17,057	1,31,65,792	64,11,336	4·70	64,75,905	...	−64,569
1903	14,52,62,379	1,39,49,922	72,31,862	4·98	68,00,305	...	+4,31,557

TABLE II.

Earnings per mile per week.	Pro : of exp : to earnings.
Rs.	
74	106·97
120	64·54
97	81·74
112	227·93
117	69·31
56	68·58
56	72·91
72	64·41
97	59·71
120	63·93
153	52·38
163	54·23
153	58·11
157	57·25
173	59·91
185	65·77
192	54·54
182	55·39
176	65·50
180	56·02
186	52·83
197	57·38
209	44·24
205	49·14
238	42·29
237	41·28
239	42·44
262	45·47
248	48·95
209	49·97
186	56·59
190	46·12
208	45·45
208	51·44
231	45·53
230	51·30
226	48·16

* Probable date of opening.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND STATE RAILWAY SYSTEM—*contd.***

10 (*b*) Hardwar-Dehra railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Hardwar to Dehra	18-11-96	1-3-00	Miles. 32·04	Miles. 32·04

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails on deodar sleepers.

Ballast.—The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing.—The line is only partially fenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Terms of contracts—

The Hardwar-Dehra railway is worked under the following contract :—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and except for *bonâ fide* temporary purposes, at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—After deduction of 50 per cent. of the gross earnings for working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares.—Rates and fares to be arranged between Government and the working agency within one-and-half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand State railway.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1897 . . .	1,96,617	...	...	...	†	...	...	...	...
1898 . . .	10,70,315	...	...	...	†	...	...	...	...
1899 . . .	28,42,687	...	...	...	†	...	...	...	...
1900 . . .	25,57,093	1,60,485	*	...	†	...	...	115	50·00
1901 . . .	28,12,801	2,13,456	1,06,728	3·80	84,220	...	+22,508	128	50·00
1902 . . .	28,36,486	2,52,435	1,26,242	4·45	85,048	11,253	+29,941	152	50·00
1903 . . .	28,44,542	2,62,719	1,31,359	4·62	85,260	20,597	+25,502	158	50·00

10 (*c*) Cawnpore-Burhwal (3′ 3⅜″ gauge) link—

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the 3′ 3⅜″ gauge systems of Northern India. The mileage shown excludes 3·66 miles of the existing line of the Lucknow-Bareilly railway between Daliganj and Aishbagh, which forms a part of the alignment of this line. Starting from the north of Burhwal station, on the Oudh and Rohilkhand State railway, it runs up to Bara Banki along a third rail laid inside the Oudh and Rohilkhand State railway line, and thence on to Malhaur a separate 3′ 3⅜″ track has been laid parallel to, and 14 feet distant from, the Oudh and Rohilkhand State railway track. From Malhaur it deviates to the east, over new country, and joins the Lucknow-Bareilly railway at the north end of Daliganj station. Passing through Daliganj, the Lucknow-Bareilly railway is utilized to Aishbagh, where it crosses that railway and runs for 2·08 miles over new country; it joins the Cawnpore branch of the Oudh and Rohilkhand State railway at mile 2·80 from Lucknow, then runs parallel to the latter line up to the Cawnpore bridge station, from which point a third rail has been laid across the Ganges bridge. After clearing the bridge, the separate track, parallel to the Oudh and Rohilkhand State railway is resumed and followed up to and through the Cawnpore (Oudh and Rohilkhand State railway) station yard, and, passing on, crosses the Grand Trunk Road, Ganges canal, and East Indian railway goods siding on a grade crossing, and joins the Cawnpore-Achnera railway at mile 83·26.

* Paid over to the Company.
† Interest was charged to Capital.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND STATE RAILWAY SYSTEM—*concld.***

10 (*c*) Cawnpore-Burhwal (3′ 3⅜″ gauge) link—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Burhwal to Daliganj	Oct. 1894	24-11-96	*34·57		1896	35
Aishbagh to Cawnpore	Oct. 1894	25-4-97	†45·03		1897	80
					1898	80
					1899	80
					1900	80
					1901	80
Total	...	...	...	79·60	1902	80
					1903	80

Details of construction—

Permanent-way.—Where the line is not mixed gauge, it is laid with new 50 lb. steel rails.

Ballast.—The line is ballasted throughout either with sand or earth with a covering of broken brick or kunkur, or with kunkur, stone, or shingle.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The Cawnpore-Burhwal railway is owned and worked by the State.

Statistics of working—

Included with the Oudh and Rohilkhand State railway (5′ 6″ gauge).

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) and (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM—**

Lines comprising system.—The Assam-Bengal railway system is made up of—

	Open line. Miles.
(*a*) Assam-Bengal railway (3′ 3⅜″ gauge)	740·38
(*b*) Noakhali (Bengal) railway (3′ 3⅜″ gauge)	34·90
Total	775·28

As it was considered that railway communication with Bengal and Assam was a matter of urgency, the construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was subsequently formed in England in April 1892 and took over the works commenced by the State.

11 (*a*) Assam-Bengal railway proper (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Chittagong Port to Chittagong		3-11-95	1·73		1895	180
Chittagong to Feni		1-7-95	56·90		1896	286
Feni to Comilla		1-7-95	39·10		1897	361
Comilla to Akhaura		1-1-96	29·41		1898	379
Akhaura to Karimganj		§4-12-96	115·00			
Karimganj to Badarpur	28-5-91	§4-12-96	12·00		1899	432
Badarpur to Damchara		23-4-99	18·53		1900	436
Damchara to Lumding		1-12-03	98·70			
Lumding to Nazira		1-1-01	141·87		1901	589
Nazira to Lakwa		15-11-01	10·71		1902	589
Lakwa to Bhojo		1-2-03	12·72		1903	740
Bhojo to Tinsukia		1-3-03	41·94			
Total Main line	...	...	...	576·61		
Branches—						
Chandpur branch—						
Laksam to Chandpur		1-7-95	31·62			
Silchar branch—						
Badarpur to Katta Khal		13-6-98	6·27			
Katta Khal to Silchar		8-11-98	12·35			
			18·62			
Gauhati branch—	28-5-91					
Gauhati to Gauhati Ghat		§1-1-97	1·32			
Gauhati to Jamuna Mukh		§1-1-97	74·11			
Jamuna Mukh to Lanka		‖2-1-99	19·11			
Lanka to Lumding (temporary station)		1-3-99	15·55			
Lumding (temporary station) to Lumding		20-2-00	3·44			
			113·53			
Total Branches	...	...	...	163·77		
Total	...	...	...	740·38		

* Including the length Burhwal to Bara Banki, 16·79 miles, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.

† Including the length on the Cawnpore bridge, 0·59 mile, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.

§ Closed for repairs after the earthquake of 12th June 1897 and reopened as follows :—

Akhaura to Srimangal	20-7-97	Karimganj to Badarpur	13-10-97
Srimangal to Kalaura	24-7-97	Gauhati to Gauhati Ghat	2-1-99
Kalaura to Karimganj	8-8-97	Gauhati to Jamuna Mukh	2-1-99

‖ Owing to the bad state of the road due to excessive rains, this length was closed for public traffic on and from 2nd October 1899 and re-opened on the 1st January 1900.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) and (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM**—*contd.*

11 (a) Assam-Bengal railway proper (3' 3¾" gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with 50 lb. flat-footed steel rails partly on sal and pyinkado and partly on bastard sal, nageshur and jara wood sleepers.

Ballast.—The ballast consists of broken brick, stone and laterite.

Tunnels.—See Appendix 37.

Bridges.—See Appendix 36.

Fencing.—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati and half a mile from Gauhati towards Lumding.

Curves.—On the Hill section the curves vary from 477 feet to 955 feet radius. On the rest of the line, there are no curves under a radius of 1,000 feet.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding, 1 in 65; between Gauhati and Tinsukia, 1 in 100; between Laksam and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150.

Terms of contract—

The Assam-Bengal railway is worked under the following contract:—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898, interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raise £1,500,000, and that any further money required, be either supplied by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of moneys paid against interest on the Company's share capital and sums applied from net earnings), are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or the line is worked at a loss. On the determination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

Contribution due to the Provident Fund, calculated at one per cent. of net earnings.

The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than $\frac{8}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital.

The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceed $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Table I.						Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1891	1,58,203	...	...	...	5,893	—5,893	...	...
1892	80,16,183	...	...	...	2,66,378	—2,66,378	...	...
1893	1,07,63,192	...	...	...	7,09,987	—7,09,987	...	...
1894	2,46,89,898	...	...	...	8,76,954	—8,76,954	...	...
1895	4,04,38,298	2,14,426	—8,047	...	13,95,636	—14,03,683	64	183·75
1896	5,21,39,304	6,18,785	33,238	0·06	23,73,034	—23,39,796	71	94·63
1897	6 37,67,401	9,90,640	72,214	0·11	22,56,279	—21,84,065	68	92·71
1898	7,56,41,721	18,08,124	54,551	0·07	24,45,275	—23,90,724	86	95·83
1899	8,69,56,236	16,19,646	3,22,704	0·37	28,63,084	—25,40,380	75	80·08
1900	9,56,01,772	17,09,955	3,64,364	0·38	33,31,390	—29,67,026	75	78·69
1901	10,41,49,467	21,34,252	4,56,654	0·44	35,06,252	—30,49,598	70	78·60
1902	11,11,34,922	20,96,058	2,54,418	0·23	38,08,387	—35,53,969	68	87·86
1903	*12,40,28,548	23,97,658	4,43,963	0·36	40,71,450	—36,27,487	72	80·51

* Including Rs. 75,70,037, interest charges to the 30th June 1898, debited to capital.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads } (a) \text{ and } (b)}$. **ASSAM-BENGAL RAILWAY SYSTEM—*concld.***

11 (*b*) Noakhali (Bengal) railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Laksam to Noakhali	6-4-01	15-5-03	29·46	
Noakhali to Saheb Ghatta		10-11-03	4·44	
TOTAL	...	...	...	34·90

Details of construction—

Permanent-way.—The line is laid with 41½ lb. steel rails on sal sleepers. A few jara wood sleepers have also been used.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The Noakhali (Bengal) railway is worked under the following contracts:—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

The general conditions of the contracts are as follows:—

Government aid.—If the net earnings in any half-year are less than Rs. 30,000, Government allow as rebate a sum not exceeding one half of the gross earnings of such half-year of the Assam-Bengal railway from interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs. 30,000. Land also has been provided free of charge.

Terms of contract.—The Company's share or stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency; but the Company can raise money at a reasonable rate of interest for *bond fide* temporary purposes.

Currency of contract.—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fail to comply with their obligations under the contract. The Secretary of State may, by giving twelve months' notice determine the contract, either on the 31st December 1922 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India, within four calendar months from the time at which the contract should be determined, a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding provided that the amount so payable shall not exceed by more than 20 per cent. the balance on the Capital Account of the Company, or be less than such balance.

Terms of working—The gross earnings are to be applied in payment—

(1) To the credit of the Provident Institution of the Assam-Bengal railway of a sum equal to one-half of 1 per cent. of the total gross earnings;

(2) Of Rs. 25 per mile open per week of the new railway maintainable by the Company; and of Rs. 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half year; and

(3) Of all moneys paid or payable to the Secretary of State for the supervison of such mileage during such half-year, the residue to be paid over to the Company as the net earnings of the railway.

Rates and fares.—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.

Statistics of working—

	TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Rebate from Assam-Bengal railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	21,04,827	30,099	2,409	·011	23,389	25,798	1·23	39	92·00

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 12 / Sub-heads (*a*) to (*c*). **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—**

Lines comprising system.—The Bengal and North-Western railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)	812·96	184·88	997·84
(*b*) Sagauli-Raxaul railway (3′ 3⅜″ gauge)	18·09	...	18·09
(*c*) Tirhoot State railway (3′ 3⅜″ gauge)	516·89	238·35	755·24
Total	1,347·94	423·23	1,771·17

Running powers—

Home line over Foreign lines—

	Miles.
Cawnpore to Burhwal, Cawnpore-Burhwal (3′ 3⅜″ gauge) link Oudh and Rohilkhand State railway	83·00
Benares Cantonment to Benares City, Oudh and Rohilkhand State railway	1·81
	84·81

The Bengal and North-Western railway has direct communication with the railway system of India at only three points on its system, *viz.*, at Burhwal, Benares and Katihar. At all other points, communication is interrupted by rivers. Communication across the Ganges is maintained with the East Indian railway at the following ferries: between Ghazipur and Tarighat (ordinary steam ferry); between Paleza Ghat and Digha Ghat (ordinary steam ferry); between Semaria Ghat and Mokameh Ghat (wagon ferry); and between Barari Ghat and Bhagalpur Ghat (wagon ferry). Eventually a branch between Bhagalpur Ghat and the East Indian railway at Bhagalpur will connect the Bengal and North-Western and East Indian railways *vid* the Bhagalpur ferry. Between Khanwa Ghat on the Kosi extension of the Tirhoot State railway and Anchara Ghat on the Kosi branch of the Eastern Bengal State railway, there is a country boat ferry worked by the Eastern Bengal State railway. There is a bridge of boats between Ajodhya and Ajodhya Ghat during the dry weather months, but during the rains this bridge is removed and replaced by a steam ferry. The Tirhoot State railway was worked by State agency until 1890, when it was leased to the Bengal and North-Western Railway Company.

12 (*a*) Bengal and North-Western railway proper (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Sonepur to Mankapur	18-5-82	15-1-85	218·50		1884	75
Mankapur to Nawabganj		2-4-84	14·00		1885	303
Nawabganj to Ajodhya		1-12-84	6·10		1886	376
			238·60		1887	376
Loop line—					1888	376
Sonepur to Bunwarchak	18-5-82	15-1-85	9·34		1889	376
Total Main and Loop lines	...	...	...	247·94	1890	376
Branches—					1891	401
Uska Bazar branch—					1892	414
Gorakhpur to Uska Bazar	3-8-85	15-12-86	39·58		1893	414
Naipalganj Road branch—					1894	414
Mankapur to Bahraich	18-5-82	2-4-84	55·00		1895	414
Bahraich to Naipalganj Road		15-12-86	33·98		1896	479
			88·98		1897	485
Revelganj branch—					1898	586
Chupra to Revelganj	Nov. 1889	15-4-91	7·34		1899	743
Revelganj to Manjhi Ghât	...	1-4-99	3·71		1900	743
			11·05		1901	743
Bahramghat branch—					1902	748
Gonda to Colonelganj	Nov. 1889	29-10-91	17·75		1903	813
Colonelganj to Jarwal Road		1-2-92	10·30			
			28·05			
Burhwal branch—						
Jarwal Road to the west bank of the Gogra river	10-1-95	18-12-96	2·63			
Gograghat to Ganeshpur		24-12-98	3·27			
Chowka Ghat to Burhwal		24-11-96	4·12			
			10·02			
Tulsipur branch—						
Gonda to Balrampur	10-1-95	15-12-96	22·00			
Balrampur to Tulsipur		1-6-98	19·00			
			41·00			
Katarnian Ghât branch—						
Nanpara to Mohinpurwa	10-1-95	15-12-96	15·00			
Mohinpurwa to Katarnian ghât		25-3-98	27·08			
			42·08			
Carried over	...	...	260·76	247·94		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) to (c)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.***

12 (*a*) Bengal and North-Western railway proper (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward	...	...	260·76	247·94
Turtipur branch—				
Bhatni to Turtipur	10-1-95	15-12-96	17·14	
Salimpur to Barhaj		1-12-97	12·77	
			29·91	
Ganges-Gogra Doab lines—				
Turtipur to Mau	...	8-6-98	28·19	
Mau to Benares	...	15-3-99	58·06	
Mau to Azamgarh	...	8-6-98	27·15	
Kopaganj Road to Ballia	...	15-3-99	37·61	
Ballia to Chand-Deara Ghat	...	12-5-99	29·00	
Aunrihar to Ghazipur Ghat	...	15-3-99	28·37	
Azamgarh to Shahganj	15-4-01	14-2-03	34·81	
Ghazipur Ghat to Phephna	23-12-01	11-3-03	31·16	
			274·35	
Total Branches	...	...	...	565·02
TOTAL OPEN MILEAGE, BENGAL AND NORTH-WESTERN RAILWAY PROPER	...	...	...	812·96
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Ganges-Gogra Doab lines—				
Kopaganj to Dohrighát	28-4-03	21-3-04	21·70	
Aunrihar to Jaunpur	1-11-02	21-3-04	36·14	
Uska Bazar to Tulsipur	31-3-03	...	53·54	
Gaisanri to Jarwa		...	12·56	
Gorakhpur to Bagaha		...	60·94	
Total Lines under construction	...	...	...	184·88
GRAND TOTAL, BENGAL AND NORTH-WESTERN RAILWAY	...	...	...	997·84

Details of construction—

Permanent-way.—The main line between Sonepur and Burhwal is laid with 50 lb. steel rails on sal sleepers. The rest of the line north of the Gogra is laid with 41¼ lb. steel rails mostly on sal sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihar-Ballia branch, which is laid with 50 lb. steel rails, is laid with 41¼ lb. steel rails on sal sleepers.

Ballast.—The line is ballasted throughout.

Bridges.—See appendix 36.

Fencing.—The line was originally unfenced except in front of villages and at level crossings and near stations, but the main line is in course of being fenced, and about 200 miles have been done.

Curves.—There is only one curve with a radius of less than 1,000 feet, *viz.*, at Paleza Ghat on the loop line, the length of which is 2,000 feet and radius 900 feet.

Gradients.—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper and these vary from time to time during the year according to circumstances.

Terms of contracts—

The Bengal and North-Western and Tirhoot State railways are worked under the following contracts :—

Contracts of—12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

18th July 1890.—Contract for the taking over and working of the Tirhoot State railway.

19th December 1894.—Contract suplemental to those of 1882, 1886 and 1890, providing for the Revelganj, Bahramghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway and for the exercise of running powers over the Cawnpore-Burhwal (3′ 3⅜″ gauge) link.

12th December 1895.—Contract modifying that of 1890.

23rd July 1896.—Contract supplemental to those of 1882, 1886, 1890, 1894 and 1895, known as the Ganges-Gogra Doab contract, for the Ganges-Gogra Doab lines of the Company's railway.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

The general conditions of the contracts are as follows :—

Government aid.—Land alone was provided free of charge.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) to (c)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM**—*con*

12 (*a*) Bengal and North-Western railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts.—(1) *Bengal and North-Western railway contract.*—The contracts of 1882, 1886 and 1894, *viz.*, those for the working of the Bengal and North-Western railway proper are current for a period of 99 years and terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, moveable machinery, stores, etc. Government may, however, determine the contract after 30 years (*i.e.*, on the 31st December 1912) or 50 years (*i.e.*, on the 31st December 1932) on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government *would have been* entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, at six months' notice if the Company fail to observe their obligations, on paying the value of rolling-stock, stores, etc., and fair value of line, less value of same treated as a reversionary sum absolutely payable on the 31st December 1981.

(2) *Ganges-Gogra Doab contract.*—The contract of 1896, *viz.*, that covering the Ganges-Gogra Doab lines runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903, but in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line as shown in sterling only, without any premium.

(3) *Tirhoot State railway contract.*—The contract of 1899, *viz.*, that for working the Tirhoot State railway, terminates on the 31st December 1904. If the original contract with the Company, dated the 12th December 1882, terminates for any reason prior to the expiry of the term of the Tirhoot contract, the latter also, *ipso facto*, terminates at the same time. Government may also terminate the contract at any time after six months' notice, if the Company fail to observe their obligations. On the determination of the contract, Government resumes possession of the State railway. Any capital sums which may have been raised by Government, and expended on the Company's lines, or which may have been raised and expended by the Company on the State railway, shall be considered as debt due from the Company and Government, respectively.

Power of Company to surrender contracts.—Nil.

Terms of working.—The Company's railway and the Tirhoot State railway are worked as one concern, a joint account of working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of the open system in each half-year, and payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) and net earnings being kept, the latter being applied in the order stated—

In payment of any further contribution (beyond that chargeable to working expenses) to the Company's Provident Institution;

In payment of interest at 4 per cent. on Rs. 5,79,74,904, being the capital raised and expended by the Company;

In payment of interest at 4 per cent. on Rs. 4,79,85,871, being the capital supplied by Government; and

In payment of the residue to Government and the Company in the ratio of their respective shares of capital, subject to the further payment to the Company of 5 per cent. of the Government's share of the residue as compensation for working the Tirhoot State railway for Government.

Rates and fares.—On the Company's section, the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section, certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts	Payments received for working the Tirhoot State railway.	Total income.	Percentage on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	1,52,47,428	77,670	Information not available.	Information not available.	−26,221	...	29	133·76
1885	2,01,36,980	12,05,320			6,10,799	3·03	72	49·32
1886	2,36,16,102	18,54,074			8,09,189	3·43	106	56·36
1887	2,56,22,684	19,44,002			8,37,004	3·27	90	56·94
1888	2,61,51,593	22,09,553			9,88,844	3·78	102	55·25
1889	2,63,41,872	22,11,824			10,53,964	4·00	103	52·35
1890	2,57,94,904	22,18,615			12,32,397	4·86	*121	*44·08
1891	2,76,68,842	24,76,909	15,54,509	69,484	16,23,993	5·87	121	40·04
1892	2,83,88,821	29,39,077	16,34,194	67,060	17,01,254	5·99	120	41·12
1893	2,84,84,234	26,14,546	15,81,860	66,842	16,48,702	5·79	128	43·20
1894	2,87,24,887	26,17,242	16,95,265	72,358	17,67,623	6·15	130	41·79
1895	3,12,95,704	25,71,036	16,82,766	72,909	17,55,675	5·61	133	42·45
1896	3,43,36,114	26,26,033	16,70,172	71,614	17,41,786	5·07	134	43·97
1897	4,10,32,207	27,55,718	17,24,277	74,905	17,99,182	4·38	128	43·78
1898	4,66,78,822	33,31,890	19,74,920	75,885	20,50,805	4·39	129	43·37
1899	5,16,06,763	43,44,861	26,70,911	61,940	27,32,851	5·30	131	46·67
1900	5,24,73,019	44,56,593	24,79,433	49,563	25,28,996	4·82	128	49·56
1901	5,50,91,830	53,66,794	30,97,372	76,853	31,74,225	5·76	140	44·51
1902	5,84,82,525	55,60,238	29,72,183	76,671	30,40,854	5·21	154	46·32
1903	6,21,09,547	61,98,433	38,53,972	1,04,369	39,58,341	6·47	161	40·64

* Includes the Tirhoot State railway from 1890.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) to (c)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.***

12 (*b*) Sagauli-Raxaul railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sagauli to Raxaul	...	1-3-99	18·09	18·09

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. steel rails on sal sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—31st October 1896 (between the Secretary of State and the Sagauli-Raxaul Railway Company) for construction and working.

5th June 1899 (between the Secretary of State and the Bengal and North-Western Railway Company) for maintenance and working.

The general conditions of the contracts are as follows:—

Government aid.—Land alone was provided free of charge.

Currency of contract.—Government may determine the contract either on the 31st December 1917 or on the 31st December in the last year of any subsequent period of 10 years, paying 25 times the average net earnings for the three years preceding the purchase.

Power of Company to surrender contract.—Nil.

Terms of working.—Forty per cent. of the gross earnings to be retained by the Bengal and North-Western Railway Company for working and maintenance (which may include any single item of capital expenditure not exceeding Rs. 200 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and 10 per cent. for supervision on the cost of Government works at Sagauli. The balance is payable to the branch Company.

NOTE.—Pending the completion of the line and works to the standard contemplated under the terms of the contract of 1896, the line is being worked under a provisional agreement approved in Government of India letter No. 164 R. C. of the 18th February 1899. Under this agreement maintenance charges are excluded from the 40 per cent. retained by the working agency and borne by the Company.

Rates and fares.—To be arranged between Government and the Company within the maxima and minima in force on the Tirhoot section.

Statistics of working—

	TABLE I.				TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	1,26,044	...	...	...	...	...
1897	6,68,783	...	...	...	...	...
1898	8,07,550	...	...	...	...	...
1899	10,81,740	5,433	*	...	30	40·00
1900	12,12,073	25,830	*	...	30	52·62
1901	10,67,014	37,182	13,593	1·27	40	63·44
1902	10,73,421	39,296	18,638	1·74	42	52·57
1903	11,16,252	43,809	18,571	1·66	51	57·61

* Credited to interest on capital.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) to (c)}}$ **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*con.***

12 (*c*) Tirhoot State railway—(3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Somaria Ghat to Dalsinghsarai	8-2-82	1-5-83	22·55		1875	38
Dalsinghsarai to Samastipur	Feb. 1874	1-11-75	14·75			
Samastipur to Muzufferpur	6-1-76	24-2-77	29·79		1876	38
Muzufferpur to Motiharee	8-7-80	1-2-83	49·57		1877	68
Motiharee to Bettiah		20-12-83	27·00			
Samastipur to Durbhanga	Feb. 1874	1-11-75	23·00		1878	68
Durbhanga to Jhanjharpur	8-7-80	1-2-83	24·00			
Jhanjharpur to Ghoghardiha	19-10-83	8-4-86	13·00		1879	85
Ghoghardiha to Nirmala		8-4-86	6·92			
Nirmala to Bhaptiahi	16-2-85	15-11-87	10·00		1880	85
Bhaptiahi to Pratapganj		1-10-88	14·00			
Pratapganj to Khandwa Ghat	...	14-12-90	8·00		1881	85
Total Main line	...	...	...	242·58		
Branches—					1882	85
Bairagnia branch—						
Durbhanga to Sitamarhi	...	1-7-90	42·00		1883	193
Sitamarhi to Riga	...	1-1-91	6·00			
Riga to Dheng	...	1-7-91	9·00		1884	226
Dheng to Bairagnia (*fair weather line*)	23-10-91	1-3-92	3·51		1885	236
			60·51			
Sonepore branch—					1886	246
Muzufferpur to Hajipur	6-2-83	26-10-84	31·25			
Hajipur to Sonepore	19-10-83	1-8-87	3·36		1887	259
			34·61			
Hajipur branch—					1888	275
Hajipur to Hajipur Ghat	...	26-10-84	1·89		1889	273
Hajipur branch loop line	...	2-11-00	3·31			
			5·20		1890	323
Hajipur-Katihar extension—					1891	337
Hajipur to Bachhwara	...	1-4-00	44·46		1892	342
Barauni Junction to Thana Bihpur	...	1-3-00	66·17			
Thana Bihpur to Katarsah	...	7-3-01	17·50		1893	342
Katarsah to Kursela (Kosi bridge and approaches)	...	10-7-02	9·75		1894	342
Kursela to Katihar	...	7-3-01	23·75			
			155·63		1895	342
Bhagalpur branch—					1896	342
Thana Bihpur to Barari Ghat	...	16-12-01	11·36			
					1897	342
Monghyr branch—					1898	342
Sahebpore Kamal to Monghyr Ghat	...	7-3-00	7·00		1899	342
Total Branches	...	...	...	274·34		
					1900	363
TOTAL OPEN MILEAGE, TIRHOOT STATE RAILWAY	...	...	...	516·89	1901	519
					1902	517
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					1903	517
Sakri to Jainagar	1-6-99	...	30·47			
Bettiah to Bagaha	23-9-03	...	49·75			
Bairagnia to Shikarpur		...	21·50			
Shikarpur to Bikna Thoree		...	58·05			
Mansi to Baptiahi		...	60·37			
Sihursa to Murliganj		...	18·61			
Total Lines under construction, Tirhoot State railway	...	...	...	238·35		
GRAND TOTAL, TIRHOOT STATE RAILWAY	...	...	...	755·24		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) to (c)}}$. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*concld.*

12 (*c*) Tirhoot State railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The sections between Sonepore and Muzaffarpur and Muzaffarpur and Barauni, which were originally laid with 41½ lb. steel rails, have been relaid with 50 lb. steel rails on sal sleepers. The section between Samastipur and Durbhanga which was originally laid with 41½ lb. steel rails has also partly been relaid with 50 lb. steel rails. There are still about 15 miles of 41½ lb. rails on this section. The remainder of the line is laid partly with 41½ lb. steel rails and partly with 50 lb. iron rails, the latter being entirely on the Bairagnia branch. The 50 lb. iron rails are laid on sal sleepers, and the remainder partly on sal and pyinkado and partly on Denham-Olpherts iron sleepers. The Hajipur-Katihar extension is laid with 50 lb. steel rails on sal and pyinkado sleepers.

Ballast.—The line is ballasted throughout.

Bridges.—See appendix 36.

Fencing.—Excluding the Hajipur-Katihar extension, the line is fenced throughout. On the Hajipur-Katihar extension the section between Hajipur and Khagaria is being fenced, but between Khagaria and Kursela it is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3·42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper and vary from time to time during the year according to circumstances.

Terms of contracts—See under Bengal and North-Western railway proper, pages 249 and 250.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1875	...	...	Information not available.	Information not available.	...	...	...	...	89	107·82
1876	...	...			...	...	...	...	71	68·67
1877	...	...			...	...	...	...	77	69·85
1878	...	...			...	...	...	...	103	75·34
1879	53,38,320	4,58,733			1,07,819	2·02	2,37,411	−1,29,592	113	76·49
1880	56,13,274	5,51,068			2,33,682	4·16	2,50,679	−16,997	102	58·40
1881	72,02,917	5,84,255			2,35,200	3·23	2,67,245	−31,045	110	59·57
1882	1,07,92,877	6,60,022			2,51,047	2·36	3,86,612	−1,32,565	126	61·50
1883	1,32,83,024	8,92,441			2,59,705	1·96	4,99,014	−2,39,309	103	70·90
1884	1,48,64,982	11,20,072			2,66,582	1·70	5,74,369	−3,07,787	105	77·60
1885	1,44,47,916	12,78,634			3,59,269	2·49	5,86,195	−2,26,926	98	71·90
1886	1,54,33,549	14,98,688			5,01,189	3·25	6,30,944	−1,29,755	109	66·56
1887	1,97,49,195	17,22,955			6,95,725	3·52	7,79,801	−84,076	122	59·62
1888	2,07,78,252	18,07,283			7,92,875	3·85	8,17,485	−18,610	123	55·89
1889	2,12,28,094	18,96,674			9,78,246	4·61	8,41,932	+1,36,314	122	48·42
1890	2,29,94,165	23,92,977			13,21,797	5·75	9,41,207	+3,80,590	*	*
1891	2,34,99,148	24,89,279	14,23,332	69,484	13,58,348	5·76	9,34,585	+4,23,463	...	...
1892	2,43,25,804	21,94,862	13,82,875	67,060	13,15,915	5·41	9,50,025	+3,65,790	...	...
1893	2,49,08,833	26,81,190	14,09,975	66,842	13,43,133	5·39	10,01,205	+3,41,928	...	...
1894	2,50,08,061	29,42,305	15,35,581	72,358	14,63,223	5·85	9,98,388	+4,64,835	...	...
1895	2,56,02,092	30,89,644	15,61,276	72,909	14,88,367	5·81	10,18,013	+4,70,354	...	...
1896	2,60,38,655	31,61,172	15,56,944	71,614	14,85,330	5·70	10,27,821	+4,57,509	...	...
1897	3,11,00,098	32,38,109	16,29,812	74,905	15,54,907	5·00	10,38,630	+5,16,277	...	...
1898	3,46,43,176	31,14,140	16,67,068	75,885	15,91,183	4·59	13,18,764	+2,72,419	...	...
1899	3,80,27,583	34,24,608	14,42,101	61,940	13,80,161	3·63	14,62,603	†− 82,442	...	...
1900	4,30,15,249	36,47,197	15,66,413	49,563	15,16,850	3·53	16,19,231	‡−1,02,381	...	...
1901	4,61,91,293	43,16,760	22,75,660	76,853	21,98,807	4·76	17,67,799	§+4,31,008	...	...
1902	4,91,41,200	45,50,632	24,55,201	76,671	23,78,530	4·84	18,77,205	+5,01,325	...	...
1903	5,08,68,468	56,72,952	31,92,619	1,04,369	30,88,220	6·07	19,86,515	+11,01,735	...	...

* Included with the Bengal and North-Western railway from 1890.
† The loss in 1899 was due to damages by flood and temporary stoppage of traffic.
‡ The loss in 1900 was due to the inclusion of the capital outlay on the Hajipur-Katihar extension, only a portion of which was opened in 1900.
§ The gain in 1901 was due to the completion of the Hajipur-Katihar extension.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168].

Number $\frac{\text{Main head 13}}{\text{Sub-heads } (a) \text{ and } (b)}$. **BENGAL DOOARS RAILWAY SYSTEM.**

Lines comprising system—The Bengal Dooars railway system is made up of—

	Open line. Miles.
(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)	36·40
(*b*) Bengal Dooars extensions (3′ 3⅜″ gauge)	116·56
Total	152·96

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

13 (*a*) Bengal Dooars railway proper (3′ 3⅜″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Main line—				
East Bank of the Teesta to Dam Dim	May 1891	15-1-93	31·00	31·00
Branch—				
Letaguri to Ramshaikat	May 1891	11-6-93	5·40	5·40
TOTAL	...	...	...	36·40

Details of construction—

Permanent-way.—The line has been laid with 41½lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 1,000.

Terms of contracts—

The Bengal Dooars railway and the extensions are worked under the following contracts :—

Contracts of.—27th April 1891.—Bengal Dooars railway principal contract.
2nd March 1898.—Contract supplemental to that of 1891 (for extensions).
27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).
7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Malbazar-Hantupara extension).

The general conditions of the contracts are as follows :—

Government aid.—Land free of cost from Government, and from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of seven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If at any period the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company, the whole of the profits go to the Company. If worked by the Eastern Bengal State railway, the Secretary of State retains each half-year 40 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of income-tax payable to Government.

Rates and fares—

Bengal Dooars railway and extensions from Mal to Madari Hat and Dam Dim to Bagrakote.—
Certain maxima and minima have been fixed subject to alteration from time to time. If gross receipts reach 12 per cent. on capital, Government may reduce maxima to the extent of 25 per cent. except certain special rates.

Extension from Barnes Junction to Lalmonir Hat—
Certain maxima and minima have been fixed within which charges can be made.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168].

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) and (b)}}$ **BENGAL DOOARS RAILWAY SYSTEM—*contd.***

13 (*a*) Bengal Dooars railway proper (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1891	16,479	...	...	...	...	...	...	...	...
1892	12,67,626	...	...	...	...	...	...	...	...
1893	18,49,091	1,14,812	57,639	3·12	...	57,639	3·12	69	49·80
1894	22,84,224	2,05,286	1,04,291	4·57	4,000	1,44,291	6·32	109	49·20
1895	23,26,476	3,53,537	1,27,458	5·48	4,000	1,31,458	5·65	125	49·73
1896	24,33,213	2,70,450	1,31,813	5·42	...	1,31,813	5·42	136	51·26
1897	26,50,713	2,86,407	1,45,289	5·48	...	1,45,289	5·48	145	49·27
1898	26,68,050	2,69,089	1,10,620	4·15	4,000	1,14,620	4·30	135	57·40
1899	26,26,748	2,73,037	1,18,416	4·51	...	1,18,416	4·51	137	55·41
1900	26,42,695	3,32,730	1,89,461	7·17	...	1,89,461	7·17	168	43·06
1901	26,44,878	3,10,920	1,76,399	6·67	...	1,76,399	6·67	156	43·27
1902	26,50,627	2,73,340	1,71,455	6·47	...	1,71,455	6·47	144	37·27
1903	27,95,547	3,09,965	2,23,786	8·30	...	2,23,786	8·30	156	27·80

13 (*b*) Bengal Dooars railway extensions. (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Eastern extension—						
Mal to Chalsa		1-4-01	5·40			
Chalsa to Chengmari*		1-1-03	13·45		1900	66
Chengmari to Dalgaon*		23-3-03	15·84		1901	74
Dalgaon to Madari Hat*		*14-5-03	9·31		1902	78
			44·00		1903	116
Southern extension—						
Barnes junction to Baura		20-4-00	28·30			
Baura to Bhotemari	2-3-98	21-10-00	16·70			
Bhotemari to Lalmonir Hat		20-11-00	20·80			
			65·80			
Western extension—						
Dam Dim to Oodlabari		1-5-01	3·30			
Oodlabari to Bagrakote		1-1-02	3·46			
			6·76			
Total	...	...	...	116·56		

Details of construction—

Permanent-way.—The line has been laid with 41½lb. flat footed steel rails on sal sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—There are two curves with a radius of 955 feet. One is 0·03 mile in length and the other 0·25 mile.

Gradients.—The ruling gradient of the Eastern extension is 1 in 200 and that of the Western extension, 1 in 100.

Terms of contracts.—See under Bengal-Dooars railway proper, page 254.

Statistics of working—

Calendar year.	Table I. Capital outlay. to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Proportion of expenditure to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	72,151	...	...	...	...	...
1898	4,03,611	...	...	...	...	...
1899	26,75,455	...	...	...	...	...
1900	47,11,632	16,191	5,015	0·11	13	72·31
1901	62,26,567	1,76,399	68,937	1·11	47	69·92
1902	72,66,166	2,53,634	86,266	1·19	62	65·99
1903	79,30,172	3,47,332	1,05,916	1·34	71	69·55

*Closed to traffic owing to breaches by floods from 28th June 1903 and reopened—Chalsa to Chengmari, 23rd October 1903 and Chengmari to Madari Hat, 16th November 1903.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168].

Number $\frac{\text{Main head 14.}}{\text{Sub-heads (a) to (d).}}$ **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM.**

Lines comprising system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

		Open line. Miles.
(*a*) Bhavnagar-Gondal-Junagad-Porbandar railway	(3′ 3⅜″ gauge)	334·19
(*b*) Dhrangadra railway	(3′ 3⅜″ gauge)	20·83
(*c*) Jamnagar railway	(3′ 3⅜″ gauge)	54·22
(*d*) Jetalsar-Rajkot railway	(3′ 3⅜″ gauge)	46·21
	Total	455·45

14 (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3′ 3⅜″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Bhavnagar to Wadhwan	19-3-79	20-12-80	*105·03		1880	105
Dhola to Dhoraji	19-3-79	19-1-81	88·89		1681 to 1887	194
Dhoraji to Porbandar	24-1-88	17-12-89	69·07			
Porbandar to Porbandar Bandar		15-3-90	†1 55		1888	210
Jetalsar to Junagad	24-12-86	1-9-88	16·00		1889	332
Junagad to Veraval (including Junagad quarry line)		1-2-89	†53·35		1890 to 1903	334
Veraval to Veraval Bandar		1-12-90	‡0·30			
Total	...	...	...	334·19		

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails laid on creosoted pine and deodar sleepers except on the Dhoraji-Porbandar section where the rails are laid on steel traverse sleepers.

Ballast.—The line is ballasted with a good quality of broken stone with the exception of one or two short lengths ballasted with kunkur.

Fencing.—The line is practically unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200 except on the Jetalsar-Veraval section, where it is 1 in 150.

Terms of contracts—

The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements :—

Agreements of—1st January 1897.—For the management and working of the "Integral railways" as one system by a Board of Control.

1st June 1898—Dhrangadra railway—
8th April 1897—Jamnagar railway—
12th April 1893—Jetalsar-Rajkot railway— } For management and working by the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration.

The general conditions of the agreements are as follows :—

Government aid.—Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary states of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those states are separately and entirely described as the "Integral railway" and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of votes recorded ("Members' single votes" and "Proprietary votes"). "Members single votes" prevail at special meetings where each member has one vote, while "Proprietary votes," *i.e.*, votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted, the terms of this agreement remain in force.

* Of this, the Bhavnagar Dock estate line, 1·03 miles, is worked for goods traffic only.
† Worked for goods traffic only.
‡ Of this, the Junagad quarry line, 2·35 miles, is worked for goods traffic only.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads (a) to (d)}}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

14 (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 3⅜" gauge)—*concld.*

Terms of contracts—*concld.*

Power of Board to determine agreement.—By unanimous vote, the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary state can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working.—Bhavnagar-Gondal-Junagad-Porbandar railway.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways, as may require apportionment, is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Dhrangadra railway—
Jamnagar railway—
Jetalsar-Rajkot railway—

The Board of Control work the railways at 40 per cent. of gross earnings of each railway *plus* actual expenditure incurred on the maintenance of way, works and stations; and supply rolling-stock at 5 per cent. of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways.

Rates and Fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	4,80,177	...	...	...	...	...
1880	49,19,304	...	...	...	...	...
1881	74,46,353	6,88,385	2,31,706	3·11	78	70·18
1882	86,75,711	8,76,836	3,54,648	4·09	87	59·55
1883	90,49,232	8,94,179	3,26,513	3·61	89	63·47
1884	92,92,040	10,92,312	4,98,107	5·36	109	54·46
1885	96,25,031	10,04,660	3,91,247	4·07	98	59·55
1886	98,57,553	9,65,379	4,15,149	4·21	96	57·00
1887	1,08,28,023	9,80,827	4,42,103	4·08	98	54·93
1888	1,30,68,663	11,20,260	5,06,545	3·88	109	50·58
1889	1,62,60,477	13,80,417	7,04,177	4·33	97	56·55
1890	1,68,42,051	15,71,788	6,00,267	3·56	91	61·81
1891	1,71,24,771	14,77,263	4,75,786	2·78	85	67·79
1892	1,72,52,030	15,78,178	4,37,876	2·54	91	72·25
1893	1,72,28,860	20,63,104	8,88,708	5·16	119	56·92
1894	1,73,65,592	18,40,287	7,91,335	4·56	106	49·61
1895	1,76,00,032	19,52,221	8,21,220	4·67	113	57·93
1896	1,75,63,395	19,80,878	9,89,274	5·63	114	50·06
1897	1,76,53,652	18,21,640	8,19,081	4·64	105	55·04
1898	1,78,56,546	16,98,657	7,09,781	3·98	97	58·22
1899	1,79,56,272	18,53,483	9,26,985	5·16	107	49·99
1900	1,80,00,616	19,53,865	10,10,773	5·62	113	48·27
1901	1,80,96,671	15,37,378	6,86,089	3·76	89	55·76
1902	1,80,87,538	13,71,837	5,66,342	3·13	79	58·72
1903	1,81,53,314	16,04,638	8,36,670	4·61	92	47·86

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads } (a) \text{ to } (d)}$ **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

14 (*b*) Dhrangadra railway (3′ 3⅜″ gauge).—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Wadhwan Junction to Dhrangadra	23-12-97	1-6-98	20·83	20·83

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast used is of broken hard sand-stone.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts.—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 256 and 257.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Table I. Gross earnings.	Table I. Net traffic receipts.	Table I. Per cent. on capital outlay	Table II. Earnings per mile per week.	Table II. Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	5,830	...	...	...	...	...
1898	5,93,589	23,395	10,617	1·79	37	54·62
1899	6,06,104	63,876	20,978	3·46	59	67·16
1900	5,86,534	57,366	18,984	3·24	53	66·91
1901	5,86,100	46,196	11,765	2·01	43	74·53
1902	5,85,911	37,731	8,075	1·38	35	78·60
1903	5,86,638	43,058	11,713	1·99	40	72·80

14 (*c*) Jamnagar railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Rajkot Junction to Bedi Bandar	Oct. 1893	8-4-97	*54·22	54·22

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails laid on creosoted pine and deodar sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and the south side of the Jamnagar station yard.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

* Of this, the Bedi Bandar Dock estate line, 3·93 miles, is worked for goods traffic only.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 14.}}{\text{Sub-heads (a) to (d)}}$, **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM**—*concld.*

14 (c) Jamnagar railway (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 256 and 257.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	17,000	...	...	...	...	...
1895	62,956	...	...	...	...	...
1896	14,91,727	...	...	...	...	...
1897	22,56,538	84,476	28,954	1·29	41	65·73
1898	23,18,496	1,02,945	31,782	1·37	36	69·12
1899	25,08,558	1,26,323	51,540	2·23	33	59·20
1900	23,09,481	1,49,153	59,540	2·58	53	60·09
1901	23,09,969	1,36,314	51,401	2·22	48	62·29
1902	23,58,240	1,31,104	53,751	2·28	46	59·00
1903	23,58,338	1,39,756	60,122	2·55	50	56·98

14 (d) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Jetalsar Junction to Rajkot	Feb. 1892	12-4-93	46·21	46·21

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails laid on creosoted pine sleepers except for five miles where the rails are laid on steel trough sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 256 and 257.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs	
1892	7,89,792	...	...	...	...	...
1893	14,35,593	1,03,006	50,896	3·55	59	50·59
1894	14,99,605	1,55,556	61,152	4·08	65	60·68
1895	15,03,585	1,83,338	77,446	5·15	76	57·76
1896	15,29,265	1,97,116	84,238	5·51	82	57·26
1897	15,47,463	2,05,253	84,720	5·47	85	58·72
1898	15,78,017	1,78,941	76,057	4·82	74	57·50
1899	15,83,208	1,92,927	78,726	4·97	45	60·43
1900	15,74,082	2,02,718	86,214	5·48	84	57·47
1901	15,74,033	1,76,388	67,251	4·27	73	61·87
1902	15,78,583	1,44,317	54,485	3 45	60	62·25
1903	15,78,656	1,66,404	63,230	4·01	69	62·00

Number $\frac{\text{Main head 15}}{\text{Sub-head (a)}}$. **BURMA RAILWAYS (3′ 3⅜″ gauge)**—

The Burma Railway Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3′ 3⅜″ gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
Mileage	1,336·97	121·27	1,458·24

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 15 / Sub-head (a). **BURMA RAILWAYS** (3′ 3½″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
IRRAWADDY SECTION—			Miles.	Miles.		Miles.
Rangoon to Prome	25-9-74	2-5-77	161·00		1877	161
					1878	161
TOTAL, IRRAWADDY SECTION	...	...	...	161·00	1879	161
					1880	167
SITTANG SECTION—					1881	167
Main line—					1882	167
Rangoon to Pegu	23-5-81	4-2-84	46·25		1883	167
Pegu to Pyuntaza		4-2-84	41·75		1884	260
Pyuntaza to Nyaunglebin		4-2-84	5·00		1885	333
Nyaunglebin to Toungoo		1-7-85	73·00		1886	333
Total Main line	...	...	166·00		1887	333
					1888	441
Branches—					1889	553
Suburban lines	25-9-74	1-8-80	6·00		1890	556
		15-7-90	3·00		1891	617
Total Branches	...	...	9·00		1892	717
				175·00	1893	730
TOTAL, SITTANG SECTION	...	...	...		1894	745
					1895	834
MANDALAY SECTION—					1896	886
Main line—					1897	887
					1898	936
Toungoo to Pyinmana	October 1886.	1-5-88	59·00		1899	993
Pyinmana to Yamethin		15-11-88	49·00		1900	1,124
Yamethin to Mandalay		1-3-89	112·00		1901	1,178
Total Main line	...	...	220·00		1902	1,261
Branches—					1903	1,337
Myingyan branch—						
Thazi to Meiktila Cantonment	1-1-92	10-5-93	12·99			
Meiktila to Myingyan	Sept. 1893	15-11-99	57·21			
			70·10			
Mandalay Shore Branch—						
Mandalay to Mandalay shore	...	April 1889	2·50			
Total Branches	...	...	72·60			
TOTAL, MANDALAY SECTION	...	...	...	292·60		
MU VALLEY SECTION—						
Main line—						
Sagaing to Shwebo	Sagaing to Kawlin 17-10-89; Kawlin to Nankan in Feb. and March 1891.	1-7-91	53·05			
Shwebo to Wuntho		4-4-92	29·46			
Wuntho to Nankan		1-11-94	15·46			
Nankan to Mohnyin	Sept. 1892.	21-10-95	74·35			
Mohnyin to Mogaung		1-3-96	52·34			
Mogaung to Myitkyina	Dec. 1895	1-1-98	36·63			
Tota Main line	...	...	331·29			
Branches—						
Sagaing to Alon	Sept. 1893	15-4-00	70·46			
Myohaung branch—						
Myohaung to Amarapura shore	17-10-89	22-11-91	6·00			
Katha branch—						
Nabha to Katha	...	2-10-95	15·00			
Total Branches	...	...	91·46			
TOTAL, MU VALLEY SECTION	...	...	...	422·75		
MANDALAY-KUNLONG SECTION—						
Myohaung to Sedaw	Oct. 1895	1-1-98	13·45			
Sedaw to Maymyo		1-4-00	26·10			
Maymyo to Nawnghkio		20-5-00	34·10			
Nawnghkio to Hsipaw		1-6-01	53·25			
Hsipaw to Lashio		1-3-03	50·94			
TOTAL, MANDALAY-KUNLONG SECTION	...	...	...	177·84		
Total, Carried over	...	...	...	1,229·19		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 15}}{\text{Sub-head (a)}}$. **BURMA RAILWAYS** (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward	...	...	...	1,229·19
BASSEIN-HENZADA-LETPADAN SECTION—				
Bassein to Henzada	7-9-99	15-12-02	82·25	
Henzada to Henzada shore		20-3-03	2·46	
Tharawaw branch—				
Letpadan (on Irrawaddy line) to Tharawaw on the east bank of the Irrawaddy river		20-3-03	23·07	
TOTAL, BASSEIN-HENZADA-LETPADAN	...	...	...	107·78
TOTAL, OPEN MILEAGE	...	...	...	1,336·97
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Pegu to Martaban	27-11-03	...	121·27	
TOTAL, LINES UNDER CONSTUCTION	...	...	...	121·27
GRAND TOTAL, BURMA RAILWAYS	...	...	...	1,458·24
DOUBLE LINE—MAIN LINE AND BRANCHES—				
Rangoon to Kemmendine	...	30-10-89	3·50	
Kemmendine to Insein	...	10-1-90	5·50	
Myohaung to Mandalay	...	3-10-99	2·45	
Rangoon to Pazundaung	...	1-6-01	0·70	
Total double line	...	...	12·15	

Details of construction—

Permanent-way.—The Irrawaddy line is laid with steel rails, 50 lb. to the yard, for a double track from Rangoon to Insein (9 miles), the remaining 152 miles being laid for a single track with 50 lb. steel rails for 115 miles, 41¼ lb steel rails for 29 miles, and 40 lb. iron rails for 8 miles. The Sittang line is laid with steel rails, 50 lb. to the yard, from Pazundaung to Deiku (81 miles), the remaining 85 miles being laid with rails, 41¼ lb. to the yard. The Mandalay line consists of 50 lb. flat-footed steel rails, with deep web fishplates of Bessemer steel. The Myingyan branch is laid with steel rails, 41¼ and 50 lb. to the yard. The Mu Valley line is laid with 41¼ lb. flat-footed steel rails, with the exception of the Alon branch, where the rails are mostly 50 lb. The Mandalay-Kunlong line and the Bassein-Henzada-Letpadan branch are laid with steel rails, 50 lb. to the yard. The sleepers throughout are generally of teak, pyinma and pyinkade, the last named largely predominating.

Ballast.—The ballast used is either shingle or broken stone.

Bridges.—See Appendix 36.

Fencing.—The main line (Rangoon to Mandalay) and the Irrawaddy line (Rangoon to Prome) are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced.

Curves.—On the main line (Rangoon to Mandalay), on the Irrawaddy line (Rangoon to Prome) on the Letpadan-Henzada-Bassein line on the Myingyan branch and on the Sagaing-Alon branch, the sharpest curve has a radius of 1,909 feet. On the Lashio branch the sharpest curve has a radius of 337 feet. On the Mu Valley line there are in all 13 curves of a radius of 573 feet, the sharpest on the line; four on the Katha branch between miles 212 and 213·8, the total length being 1,568 feet, and 9 on the main line between miles 171 to 235 on the Naukan-Mohyin section, 3,790 feet long.

Gradients.—The ruling gradient on the line is 1 in 200, on the Lashio branch, it is 1 in 25 compensated; on the Mu Valley, 1 in 60, uncompensated; on the Myingyan branch 1 in 100 uncompensated; and on the Sagaing-Alon branch, 1 in 150 uncompensated.

Terms of contract—

The railways are worked under the following contract:—

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

The general conditions of the contract are as follows:—

Government aid.—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was also provided free of charge.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract, on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause, the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

The equivalent of the interest paid for the half-year on any debentures issued by the Company;

The equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 15}}{\text{Sub-head (a)}}$. **BURMA RAILWAYS** (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

The equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government;

After payment of the interest above-mentioned any surplus, which may remain unpaid in a year ending on the 30th June, to be divided between Government and the Company, in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1877	...	...	...	...	...	...	...	61	129·36
1878	...	...	...	...	...	...	...	115	93·03
1879	1,22,86,597	9,55,913	1,41,743	1·14	5,47,488	...	—4,05,695	114	85·17
1880	1,35,87,340	13,22,710	5,21,085	4·14	5,62,381	...	—41,246	158	60·60
1881	1,36,51,992	15,43,622	6,45,077	4·73	5,86,210	...	+58,867	184	58·21
1882	1,78,39,222	15,75,691	6,30,430	3·53	6,23,969	...	+6,461	188	59·99
1883	2,19,77,689	15,62,886	5,60,766	2·55	7,46,068	...	—1,85,302	187	64·66
1884	2,56,37,089	21,05,421	8,21,936	3·21	9,69,215	...	—1,47,279	181	60·96
1885	2,12,85,343	21,63,656	4,75,123	1·73	10,61,184	...	—5,88,061	143	78·13
1886	2,88,52,604	26,57,955	9,41,149	3·26	12,64,242	...	—3,23,093	156	64·51
1887	3,66,52,817	33,24,263	15,58,303	4·25	13,15,249	...	+2,43,054	192	53·12
1888	4,83,73,677	38,76,218	12,71,960	2·63	18,18,560	...	—5,46,600	171	62·33
1889	5,12,49,158	46,90,263	15,73,552	3·07	20,17,224	...	—4,43,672	169	66·45
1890	5,56,22,296	54,71,432	23,48,194	4·22	21,35,308	...	+2,12,883	210	57·08
1891	6,08,31,289	58,55,197	23,71,392	3·90	23,28,287	...	+43,105	199	59·50
1892	6,64,02,875	71,00,618	33,86,088	5·10	24,90,321	...	+8,95,867	237	52 31
1893	7,03,47,995	67,22,506	22,42,492	3·19	27,19,995	...	—4,77,503	178	66·64
1894	7,37,14,721	62,87,854	23,23,328	3·15	28,94,375	...	—5,71,047	164	63·05
1895	7,57,29,659	67,11,062	27,02,356	3·57	30,01,163	...	—2,98,807	169	59·73
1896	8,13,44,229	76,08,558	29,85,751	3·67	34,43,442	...	—4,57,691	187	60·76
1897	8,73,31,890	86,76,403	38,82,673	4·45	38,31,674	1,62,877	—1,11,878	188	55·25
1898	9,24,93,509	89,91,451	37,88,523	4·10	39,49,899	1,61,076	—3,22,452	184	57·87
1899	10,11,17,647	88,25,724	35,78,407	3·54	38,35,209	1,24,994	—3,81,796	179	59·45
1900	11,33,96,635	1,10,29,947	48,94,824	4·43	38,49,026	3,47,606	+6,98,192	195	55 62
1901	11,99,22,408	1,18,35,329	49,89,656	4·16	40,41,108	4,42,439	+5,06,109	197	58·02
1902	12,70,23,590	1,25,02,671	52,72,683	4·66	43,94,523	4,69,365	+4,08,495	203	57·83
1903	13,01,30,277	1,36,14,478	52,19,322	4·01	44,06,500	4,32,246	+3,80,576	197	61·66

Number $\frac{\text{Main-head 16}}{\text{Sub-head (a)}}$. **DEOGHUR RAILWAY** (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Baidyanath to Deoghur	October 1881	23-12-82	4·79	4·79

Details of construction—

Permanent-way.—The permanent-way is laid with 36 lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 2,640 feet and extends over a length of 3,000 feet.

Gradients.—The ruling gradient is 1 in 80 except in the 2nd mile, where it is 1 in 60.

Terms of contract—

The railway is worked under the following contract:—

Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 16}}{\text{Sub-head (a)}}$. DEOGHUR RAILWAY (3′ 3½″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the contract are as follows:—

Government aid.—Land alone was provided free of charge.

Terms of contract.—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption. Government may also determine the contract after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with an additional bonus not exceeding 20 per cent. of such value.

Rates and fares.—Certain maxima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Table I. Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	2,78,331	19,689	6,242	2·28	79	68·06
1884	2,75,000	23,735	10,701	3·90	83	54·90
1885	2,75,000	25,987	9,908	3·60	88	58·69
1886	2,75,042	25,017	11,748	4·27	100	53·06
1887	2,75,043	24,532	12,108	4·40	93	50·64
1888	2,81,180	25,812	11,521	4·10	104	55·37
1889	2,82,876	28,583	12,695	4·49	115	55·51
1890	2,82,616	26,095	10,915	3·86	105	58·17
1891	2,82,752	31,165	15,429	5·46	125	50·49
1892	2,88,929	26,964	9,707	3·37	108	64·00
1893	2,87,364	37,809	19,103	6·65	152	49·47
1894	2,87,526	29,425	9,659	3·36	118	67·17
1895	2,88,086	33,611	15,308	5·31	130	54·46
1896	2,87,797	30,014	11,498	4·00	120	61·69
1897	2,87,942	30,320	11,152	3·87	122	63·23
1898	2,88,453	32,100	6,601	2·28	129	79·44
1899	2,87,525	33,262	6,678	2·32	134	79·92
1900	2,87,379	34,900	7,376	2·56	140	78·87
1901	2,85,265	48,293	18,616	6·53	194	61·45
1902	3,01,057	29,758	6,025	2·00	120	79·75
1903	3,01,357	40,458	10,622	3·53	162	73·75

Number $\frac{\text{Main-head 17}}{\text{Sub-heads (a) and (b)}}$. DIBRU-SADIYA RAILWAY SYSTEM—

Lines comprising system.—The Dibru-Sadiya railway system is made up of—

	Open line. Miles.
(*a*) Dibru-Sadiya railway (3′ 3½″ gauge)	77·50
(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3½″ gauge)	11·00
Total	88·50

17 (*a*) Dibru-Sadiya railway proper (3′ 3½″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh, eastward as far as the Dinjan stream	1881	Aug. 1882	15·00		1882	15
Dinjan stream to Makum Junction		16-7-83	23·50		1883	38
Makum Junction to Dihing bridge		2-5-84	23·00		1884	71
Total Main line	...	...	...	61·50		
Talap branch—						
Makum Junction to Dum-Duma	1881	2-5-84	10·00		1885 to 1903	77
Dum-Duma to Talap		5-2-85	6·00			
Total Branch	...	...	...	16·00		
GRAND TOTAL	...	...	...	77·50		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main-head 17}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—*contd.***

17 (*a*) Dibru-Sadiya railway proper (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line throughout was originally laid with steel rails, 41¼ lb. to the yard; these are now gradually being replaced by 50 lb. steel rails. The sleepers are chiefly uriam; but about 30,000 cast iron plate sleepers of the Denham-Olpherts type are distributed throughout the main line, three being put into each rail length.

Ballast.—The line is unballasted for one mile from Lower Steamer Ghat (Dibrugarh) and for 16 miles between Makum junction and Talap. On the rest of the line, broken stone ballast has been used.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—There are no curves with a radius of less than 700 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881—Contract modifying that of 1880.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee payment of a subsidy, twelve months after the opening of the main line throughout or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line, not exceeding in any year Rs. 80,000. Similarly, Government guarantee a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The free use of public roads is also provided for.

Currency of contract.—If the Company fail to fulfil their obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. If the Company do not maintain or work the railway for any time over fourteen days in any year, Government can deduct from the subsidy Rs. 210 in the case of the main line and Rs. 262 in the case of both main line and Makum branch each day, and in default Government will be discharged from all liabilities or obligations under this contract and can call on the Company to remove all rails, etc., and give up possession of the lands, roads, etc., the Company bearing all expense in restoring the same to their original condition. Government may also determine* the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

Power of Company to surrender contract.—Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—To be approved by Government from time to time while subsidy is payable. If the net profits exceed 12 per cent of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from local Government.	Total income.	Percentage of total income on capital outlay.
	Rs.	Rs.	Rs.		Rs.	Rs.	
1883	22,22,253	48,220	—35,375	...	...	—35,375	...
1884	40,65,288	2,06,133	—68,406	...	54,550	—13,856	...
1885	49,46,729	2,57,335	—63,864	...	54,500	—9,364	...
1886	49,73,753	3,46,479	53,154	1·07	54,654	1,07,808	2·17
1887	53,32,605	4,04,928	1,02,540	1·92	1,00,000	2,02,540	3·80
1888	53,73,445	4,25,530	1,01,759	1·89	1,00,000	2,01,759	3·75
1889	55,18,750	4,64,018	1,25,147	2·27	1,00,000	2,25,147	4·08
1890	57,06,682	5,14,266	1,76,960	3·10	1,00,000	2,76,960	4·85
1891	67,05,474	4,98,682	1,70,526	2·54	1,00,000	2,70,526	4·03
1892	69,56,304	5,13,213	1,63,719	2·35	1,00,000	2,63,719	3·79
1893	71,70,562	5,12,098	1,52,972	2·13	1,00,000	2,52,972	3·53
1894	70,97,487	5,31,645	1,95,732	2·76	1,00,000	2,95,732	4·17
1895	74,02,729	6,01,142	2,69,543	3·64	1,00,000	3,69,543	4·99
1896	74,01,496	6,47,360	3,12,286	4·22	1,00,000	4,12,286	5·57
1897	74,20,119	7,74,189	2,64,750	3·57	1,00,000	3,64,750	4·92
1898	74,40,474	7,81,415	2,82,478	3·80	50,000	3,32,478	4·33
1899	74,56,183	8,59,414	4,49,688	6·03	†37,978	4,87,666	6·54
1900	77,14,349	9,00,847	4,62,381	5·99	...	4,62,381	5·99
1901	82,00,747	9,28,578	4,73,307	5·77	...	4,73,307	5·77
1902	82,00,694	8,51,880	4,11,187	5·01	...	4,11,187	5·01
1903	82,32,530	9,16,777	4,57,974	5·56	...	4,57,974	5·56

TABLE II.

Earnings per mile per week.	Proportion of expenses to earnings.
Rs.	
52	171·70
67	131·61
62	123·03
81	80·65
94	74·68
105	76·09
114	72·26
127	65·59
123	65·80
127	68·10
127	70·13
132	63·18
149	55·16
161	51·76
192	68·12
194	63·85
213	47·68
224	48·67
230	49·03
211	51·73
227	50 05

17 (*b*) Ledo and Tikak-Margherita Colliery railway. (3′ 3⅜″ gauge)—

The line was originally used only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and working taken over by the Dibru-Sadiya railway from the 1st January 1897.

* NOTE.—The Company having waived all their rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 28rd December 1901).

† Subsidy due for previous period received during 1899.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168].

Number $\frac{\text{Main head 17}}{\text{Sub-heads (a) and (b)}}$ **DIBRU-SADIYA RAILWAY SYSTEM—*concld.***

17 (*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3½″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Dihing Bridge to Ledo	...	17-2-84	7·50			
Namdang branch—						
Margherita to Namdang	...	1-1-01	3·50		1884 to 1900	8
Total	...	...	...	11·00	1901 to 1903	11

Details of construction—

Permanent-way.—The line is laid with 50 lb. steel rails on uriam sleepers.

Ballast.—The main line is three-fourths ballasted, but the Namdang branch is unballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract:—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms—Contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

The general conditions are as follows:—

Government aid.—Nil.

Currency of contract.—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles and for a further term of 30 years within an area of at least 4 square miles.

Power of Company to surrender contract.—Nil.

Terms of working.—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it, all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings plus 5 per cent. on the gross earnings of the colliery for rolling-stock.

Rates and fares.—Certain rates have been sanctioned by Government for the carriage of goods.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	11,46,240	45,871	8,024	0·70	88	82·51
1898	12,00,698	55,313	3,752	0·31	142	93·22
1899	12,83,416	63,084	22,053	1·72	162	65·04
1900	12,84,375	65,724	17,931	1·40	169	72·64
1901	16,30,162	70,298	11,145	0·68	123	84·15
1902	16,58,446	58,259	497	0·03	102	99·25
1903	16,62,082	59,077	−8,208	...	103	113·89

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 18 / Sub-heads (*a*) to (*c*) **JODHPUR-BIKANER RAILWAY SYSTEM—**

Lines comprising system.—The Jodhpur-Bikaner railway system is made up of—

	Open line. Miles.
(*a*) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)	454·94
(*b*) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)	245·35
(*c*) Jodhpur-Hyderabad railway (British section) (3' 3½" gauge)	123·98
Total	824·27

18 (*a*) Jodhpur-Bikaner (Jodhpur section) (3' 3½"gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Marwar Railway Junction to Marwar Pali	1881	24-6-82	19·00		1882 1883	19
Marwar Pali to Luni Junction	1883	17-6-84	25·00		1884	44
Luni Junction to Jodhpur	1884	9-3-85	20·00		1885	64
Jodhpur to Merta Road	1890	8-4-91	64·00		1886	64
Merta Road to Kuchaman Road	July 1891	13-3-93	73·00		1887 to 1890	124
Luni Junction to Pachpadra	31-12-85	22-3-87	60·00			
Balotra to Barmer	Aug. 1897	15-5-90	60·00		1891	247
Barmer to the Jodhpur Frontier		22-12-00	24·44		1892	247
Merta Road to Nagour	1890	16-10-91	35·00		1893 to 1898	320
Nagour to Bhagu		9-12-91	24·50		1899	380
Total	...	...	...	454 94	1900 to 1903	455

Details of construction—

Permanent-way—Between Kuchaman Road and Jodhpur and between Merta Road and Bhagu, the permanent-way consists of 36 lb. flat-footed steel rails, laid on steel trough and deodar sleepers. From Jodhpur to Marwar Railway Junction, the line was originally laid with second hand 36 lb. iron rails on jungle wood and half round creosoted pine sleepers, these have all been replaced by 41½ lb. and 50 lb. steel rails laid on deodar sleepers and for a short length on steel sleepers. The line between Balotra and the Frontier is with laid on 50 lb. steel rails and creosoted pine and steel sleepers. The permanent-way between Luni Junction and Balotra has been re-laid with 50 lb. steel rails on pine sleepers. The Balotra-Pachpadra section is laid with 36 lb. steel rails on steel trough sleepers; these are being gradually replaced by deodar sleepers on account of the salt soil.

Ballast—On the greater portion of the line the ballast consists of coarse sand and small kunkur; but on the Merta Road-Kuchaman Road section it is chiefly broken stone.

Fencing.—With the exception of a few stations, the line is practically unfenced.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—18th July 1889 } (between the Government of India and the Jodhpur and Bikaner Durbars) for
30th July 1889 } constructing and working the line.

The General conditions of the contracts are as follows:—

Government aid.—The line is the exclusive property of the two Durbars.

Currency of contracts.—These contracts may be modified at any time by mutual consent.

Terms of working.—Each Durbar to receive all the profits of the section of line belonging to the Durbar.

Rates and fares.—No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report of 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) to (c)}}$ **JODHPUR-BIKANER RAILWAY SYSTEM—*contd.***

18 (*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	4,99,966	40,361	23,119	4·62	42	42·74
1884	8,09,995	64,262	31,748	3·92	39	50·59
1885	15,40,335	1,70,691	1,12,505	7·30	54	34·30
1886	21,22,593	2,05,728	1,33,318	6·28	62	35·20
1887	22,81,433	3,18,703	1,91,677	8·40	55	39·86
1888	22,80,006	3,60,603	1,91,556	8·40	56	46·91
1889	22,73,978	3,59,353	1,92,258	8·45	56	46·50
1890	22,78,398	3,70,825	1,96,192	8·63	58	47·09
1891	41,87,110	6,12,889	3,34,364	7·99	66	45·44
1892	60,59,552	9,46,980	5,28,941	8·73	74	44·14
1893	64,74,611	8,31,765	4,33,995	6·70	52	47·83
1894	64,49,374	10,81,156	6,69,378	10·38	65	38·09
1895	64,32,934	9,74,738	5,69,246	8·85	58	41·60
1896	64,78,328	11,64,465	7,38,273	11·40	70	36·60
1897	74,90,176	11,22,558	7,44,799	9·94	67	33·66
1898	1,00,85,594	12,22,726	7,20,956	7·25	73	42·22
1899	1,13,42,183	19,09,097	11,66,844	10·29	102	38·88
1900	1,14,23,508	16,28,478	9,07,488	7·94	81	44·27
1901	1,17,24,896	15,67,078	7,14,826	6·10	66	54·39
1902	1,18,69,424	16,76,216	8,35,202	7·04	71	50·17
1903	1,19,31,459	16,34,708	8,91,196	7·47	69	45·48

18 (*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Bhagu to Bikaner	1890	9-12-91	43·50		1890 to 1897	44
Bikaner to Dulmera	Dec. 1895	2-6-96	42·09			
Dulmera to Lankaransar	27-1-98	1-1-1	6·32		1898	86
Lankransar to Suratgarh	9-2-99		63·53		1899	95
Suratgarh to Bhatinda	15-7-99	9-9-02	88·00		1900	86
					1901	157
					1902	245
TOTAL, BIKANER SECTION	...	...	...	245·35	1903	245

Details of construction—

Permanent-way.—The permanent-way consists of 36 lb. flat footed steel rails, laid on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is practically unfenced except at a few stations.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

See under Jodhpur section, page 266.

Statistics of working—

Calendar year.	Table I. Capital outlay to the end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	4,15,590	...	...	...	...	...
1891	14,32,706	5,139	2,724	0·19	36	46·99
1892	9,48,622	76,547	24,904	2·63	34	67·47
1893	9,65,771	66,725	25,735	2·66	30	61·43
1894	9,69,407	80,274	40,447	4·17	35	49·63
1895	9,71,084	86,538	45,096	4·64	38	47·89
1896	9,73,294	1,20,727	75,382	7·75	53	37·56
1897	9,78,473	1,17,010	65,504	6·73	52	44·02
1898	23,14,152	1,37,472	77,616	3·35	31	43·54
1899	28,61,917	1,74,539	1,04,344	3·65	37	40·22
1900	32,60,432	1,92,358	1,04,962	3·22	43	45·43
1901	48,93,535	2,46,875	1,05,697	2·16	30	57·18
1902	52,49,339	3,22,022	1,42,580	2·72	39	55·72
1903	51,30,925	3,25,323	2,66,197	5·19	41	49·33

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) to (c)}}$ **JODHPUR-BIKANER RAILWAY SYSTEM—*concld.***

18 (*c*) Jodhpur-Hyderabad (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
JODHPUR-HYDERABAD (BRITISH SECTION)—			Miles.	Miles.		Miles.
Hyderabad to Shadipalli	5-3-91	*18-8-92	55·49		1892 to 1899	59
Shadipalli to the Jodhpur Frontier	Aug. 1897	22-12-00	68·49			
TOTAL, JODHPUR-HYDERABAD (BRITISH SECTION)	...	...	....	123·98	*1900 to 1903	124

Details of construction—

Permanent-way.—The Hyderabad-Shadipalli section is laid with 60 lb. iron rails on deodar sleepers, with the exception of 2 miles near Shadipalli which has been relaid with 50 lb. steel rails. On the Shadipalli-Jodhpur Frontier section, about 14 miles east of Shadipalli are laid with 41½ lb. steel rails on Denham-Olpherts' cast-iron sleepers, and the remainder with 50 lb. steel rails on deodar sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations, the line is practically unfenced.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3′ 3⅜″ gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows:—

Currency of agreement.—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native state sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares.—Maximum and minimum rates and fares and classification in force on the North Western State railway from time to time to be in force on the British section.

NOTE.—Government of India, No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods, which is in force on the Native state section, being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western State railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

Statistics of working—

	TABLE I.						TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1891	2,81,401	...	...	...	5,356	—5,356	...	...
1892	16,31,818	33,206	—1,994	...	59,649	—61,598	29	105·87
1893	16,61,091	1,30,817	16,471	0·99	65,767	—49,296	43	87·41
1894	17,27,619	1,45,222	36,062	2·08	68,940	—32,878	47	75·17
1895	17,74,095	1,68,189	46,609	2·63	71,080	—24,471	55	72·28
1896	18,00,799	1,87,503	64,376	3·57	71,420	—7,044	61	65·67
1897	18,37,796	2,05,182	59,413	3·23	73,552	—14,139	67	71·04
1898	20,19,772	2,22,647	70,159	3·47	77,553	—7,394	73	68·49
1899	33,48,948	2,25,242	88,463	2·64	1,07,380	—18,917	74	60·73
1900	†41,71,400	1,93,211	65,933	1·10	1,78,984	—1,13,051	65	65·93
1901	38,81,861	4,24,807	1,73,567	4·47	1,52,429	‡+21,138	66	59·09
1902	40,45,972	5,04,008	2,18,814	5·41	1,59,771	+59,043	78	56·59
1903	40,45,338	5,34,094	2,62,379	6·49	1,60,179	+1,02,200	91	55·08

* Date of opening of standard gauge line; converted and opened on the 3′ 3⅜″ gauge on the 20th October 1901.
† Including the Hyderabad-Rahoki section.
‡ The gain in 1901 was due to the completion of the line which was previously only partially open.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$ ROHILKUND AND KUMAON RAILWAY SYSTEM.

Lines comprising system.—The Rohilkund and Kumaon railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	53·92	148·00	201·92
(*b*) Lucknow-Bareilly State railway (3′ 3⅜″ gauge)	237·04	...	237·04
(*c*) Powayan Light railway (2′ 6″ gauge)	39·50	...	39·50
Total	330·46	148·00	478·46

Running powers—

Home line over Foreign line :—

	Miles.
Bhojeepura to Bareilly, Lucknow-Bareilly State railway	12·00

19 (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge).—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Bhoojeepura to Kathgodam	1882	12-10-84	53·92	53·92	1884 to 1903	54
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Bareilly to Soron	3-7-03	...	56·00			
Moradabad to Ramnagar		...	47·00			
Lalkua to Kashipur		...	45·00			
TOTAL LINES UNDER CONSTRUCTION	...	...	...	148·00		
GRAND TOTAL	...	...	...	201·92		

Details of construction—

Permanent-way.—The permanent-way consists of 41½lb. steel rails laid on sál, asna and deodar sleepers.

Ballast.—The ballast consists of broken brick, shingle and kunker.

Fencing.—The line is unfenced except at stations and for about 21 miles between Haldwani and Kichha.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

Terms of contracts—

The Rohilkund and Kumaon, and Lucknow-Bareilly State railways are worked under the following contracts—

Contracts of—12th October 1882.—Rohilkund and Kumaon Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly State railway and the Rohilkund and Kumaon Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

The general conditions of the contracts are as follows:—

Government aid.—Company's section.—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased after 31st December 1894. Land was provided free, subject to the condition that the Company pay on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantees as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from their own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was also provided free of charge.

Note.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

Currency of contracts.—

(1) *Rohilkund and Kumaon railway contract.*—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932) by giving 12 months' notice. If the contract terminate by such notice or by efflux of time, Government is to pay 25 times the average net earnings.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168].

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

19 (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

deducting the Government share of surplus profits during the 5 years preceding the termination. The Government may also determine the contract at any time on six months' notice, if the Company fail to observe their obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove their property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) *Lucknow-Bareilly State railway.*—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year by giving twelve months' notice. In the event, however, of the original contract dated the 12th October 1882 terminating by efflux of time or under notice of purchase or notice of determination, this contract *ipso facto* also terminates at the same time. Government may also terminate the contract if the Company fail to observe their obligations after six months' notice. On determination of the contract, Government resume possession of the State railway on payment to the Company of the amount of the capital received or take over their liabilities with respect to such capital.

Power of Company to surrender contract.—Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently, half the surplus profits, after 5 per cent. for the year (within a limit of £5,000 for each half-year) has been appropriated to the Company, is to be applied in repayment to Government of arrears of Guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897, Government are to receive half the surplus profits in excess of 6 per cent.

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as their share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied:—in meeting payment of interest on the debentures, and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; in payment to Government of interest at 4 per cent. on their capital in the undertaking; the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (1) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1884	19,40,266	36,543	1,734	0·09	...	1,734	0·09	51	95·16
1885	21,71,124	2,38,572	40,153	1·85	40,000	80,153	3·69	68	66·40
1886	22,52,962	3,00,191	83,832	3·72	40,000	1,23,832	5·50	86	58·75
1887	22,91,619	3,19,274	76,800	3·35	40,000	1,16,800	5·10	92	63·42
1888	23,40,100	3,34,092	1,02,120	4·36	40,000	1,42,120	6·07	96	57·46
1889	23,96,624	3,72,270	1,20,135	5·01	40,000	1,60,135	6·69	107	56·98
1890	20,37,223	3,14,834	1,11,003	5·45	40,000	1,51,003	7·41	90	52·04
1891	20,49,458	3,85,084	1,33,440	5·62	20,000	1,53,440	7·49	112	58·22
1892	20,58,575	5,20,567	1,57,780	6·82	40,000	1,97,780	9·61	127	54·17
1893	20,82,280	4,25,909	1,43,180	6·17	40,000	1,83,180	8·80	124	56·78
1894	20,80,440	4,59,315	1,75,191	7·16	40,000	2,15,191	10·34	134	52·91
1895	20,78,251	4,04,504	1,52,973	7·36	...	1,52,973	7·36	118	62·18
1896	20,79,863	4,26,905	1,54,595	7·43	...	1,54,595	7·43	125	63·79
1897	21,20,428	4,23,720	1,73,184	8·17	...	1,73,184	8·17	124	59·33
1898	21,42,552	4,62,308	2,21,899	10·36	...	2,21,899	10·36	135	52·24
1899	21,48,313	4,65,623	2,34,020	10·89	...	2,34,020	10·89	136	49·74
1900	31,53,125	4,37,572	2,24,048	10·59	...	2,28,048	10·59	156	48·64
1901	22,09,423	3,84,314	2,09,896	9·50	...	2,09,896	9·50	112	45·38
1902	23,36,911	4,10,626	2,18,317	9·37	...	2,18,317	9·34	146	46·83
1903	25,89,790	4,13,147	2,20,405	8·51	...	2,20,405	8·51	121	46·65

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

19 (*b*) Lucknow-Bareilly State railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—					1884	36
Lucknow to Sitapur	8-10-84	15-11-86	55·00		1885	36
Sitapur to Lakhimpur		15-4-87	28·50		1886	91
Lakhimpur to Gola Gokaran Nath		15-12-87	21·50		1887	141
Gola Gokaran Nath to Pilibhit	27-12-89	1-4-91	57·55		1888	141
Pilibhit to Bhoojeepura	Bareilly to mile 4·62 on 17-3-82	15-11-84	24·00		1889	141
Bhoojeepura to Bareilly	Mile 4·62 to Pilibhit, 24-2-83.	12-10-84	12·00		1890	141
					1891	198
Total Main line	...	...	...	198·55	1892	198
Branches—					1893	222
Bareilly grain siding	24-3-92	1-4-94	1·75		1894	231
Dudhwa branch—					1895	231
Mailani to Sarda	Mailani to Dudhwa, 3-12-90;	1-1-93	15·00		1896	231
Sarda to Sohela	Dudhwa to Sonaripur 2-11-93	10-3-93	8·50		1897	231
Sohela to Sonaripur		18-3-94	7·37		1898	231
Dudhwa to Chandan Choki	12-4-01	4-4-03	5·87		1899	231
Total Branches	...	...	...	38·49	1900	231
TOTAL OPEN MILEAGE	...	...	...	237·04	1901	231
					1902	231
					1903	237

Details of construction :—

Permanent-way.—The permanent-way consists of 41¼lb. steel rails (with the exception of the old Oudh and Rohilkhand railway 60lb. steel rails between Daliganj and Lucknow Junction), laid on sal, asna and deodar sleepers.

Ballast.—The ballast consists of broken bricks, kunkar and shingle.

Fencing.—The line is unfenced except at stations and for .7 miles between Lucknow Junction and Mariaon.

Curves.—The only curve with a radius of less than 1,000 feet occurs between Lucknow Junction and Lucknow City stations and is 0·63 miles in length.

Gradient.—The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts—

See under Rohilkund and Kumaon railway proper, pages 269 and 270.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Table II. Bareilly-Pilibhit, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Sitapur-Seramau, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Bareilly, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1883	4,84,915	...	...	...	11,192	...	−11,192	...	...	...	...	...	...
1884	13,43,699	10,239	839	0·06	36,572	...	−35,733	32	91·81	....	...	...	...
1885	25,45,567	82,827	17,243	0·68	53,247	...	−36,004	44	83·79	...	...	...	...
1886	42,16,146	1,15,296	28,729	0·68	1,48,570	...	−1,19,841	53	77·46	45	76·29	...	...
1887	52,24,221	2,92,470	67,924	1·30	1,85,046	...	−1,17,122	52	71·47	46	73·49	...	...
1888	52,82,870	3,52,327	99,031	1·87	2,03,503	...	−1,04,472	50	70·31	47	70·81	...	...
1889	54,59,585	4,28,731	1,47,868	2·70	2,16,189	...	−68,321	59	66·45	59	65·10	...	...
1890	65,33,324	4,56,738	1,32,338	2·02	2,30,699	...	−98,361	64	66·08	62	72·78	...	...
1891	79,17,846	4,95,068	1,73,011	2·19	2,72,065	...	−99,054	...	...	...	...	56	65·05
1892	81,66,804	6,82,836	2,74,601	3·36	3,07,651	11,501	−44,551	...	...	...	...	66	59·72
1893	83,89,362	7,28,878	2,73,541	3·26	3,26,776	2,135	−55,364	...	...	...	...	67	62·29
1894	85,93,058	9,72,269	4,48,218	5·22	3,45,323	79,310	+ 23,585	...	...	...	...	87	59·25
1895	87,22,466	8,25,934	3,13,116	3·59	3,56,596	15,834	−59,314	...	...	...	...	74	61·90
1896	89,68,620	8,27,599	3,02,071	3·37	3,48,885	13,415	−60,229	...	...	...	...	75	63·32
1897	93,02,715	8,27,371	3,35,776	3·61	3,61,550	26,980	−52,754	...	...	...	...	69	50·42
1898	94,90,476	10,34,088	5,00,200	5·27	3,64,852	66,721	+68,627	...	...	...	...	94	51·62
1899	94,97,485	12,72,160	6,33,355	6·63	3,65,537	76,332	+1,91,486	...	...	...	...	114	50·23
1900	99,21,433	12,53,801	6,51,957	6·57	3,73,097	1,47,611	+ 1,31,249	...	...	...	...	107	48·72
1901	1,01,83,243	13,72,520	7,58 124	7·44	3,91,796	99,195	+ 2,67,133	...	...	...	...	123	44 76
1902	1,12,96,019	14.53,329	7,69,568	6 81	4,23,528	71,666	+ 2,74,374	...	...	...	...	132	47·05
1903	1,15,01,911	14,03,266	7,48,689	6·51	4,53,825	52,573	+ 2,42,291	...	...	...	...	126	46·65

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*concld.***

19 (*c*) Powayan Light railway (2′ 6″ gauge)—

The line was originally constructed by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Progress in opening.—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Shahjahanpur to Powayan	Jany. 1889	17-6-90	17·00		1890	17
Powayan to Khotar		19-5-91	14·00		1891	31
Khotar to Mailani	Feby. 1894	22-12-94	8·50		1892	31
					1893	31
TOTAL	...	...	...	39·50	1894 to 1903	40

Details of construction.—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lb. to the yard, laid on sal sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 1,00.

Terms of contracts—

The Powayan Light railway is worked under the following contracts:—

Contract of—1st July 1901 (between the Secretary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows:—

Government aid.—Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent. of the gross earning until the line is fully equipped, and thereafter, the same percentage as that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200 and subject to maximum charge of Rs. 20 per mile in each half-year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Bareilly State railway.

Statistics of working.—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs	
1901	8,41,038	66,862	20,059	2·39	33	70·00
1902	8,93,456	75,675	22,521	2·52	37	70·24
1903	8,94,619	71,815	23,482	2·18	35	60·34

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM** (3′ 3⅜″ gauge)—

Lines comprising system.—The South Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) South Indian railway (3′ 3⅜″ gauge)	1,123·13	9·00	1,132·13
(*b*) Karaikkal-Feralam railway (3′ 3⅜″ gauge)	14·65	...	14·65
(*c*) Pondicherry railway (3′ 3⅜″ gauge)	7·85	...	7·85
(*d*) Tanjore District Board railway (3′ 3⅜″ gauge)	99·46	5·53	104·99
(*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)	49·50	0·91	50·41
(*f*) Tinnevelly-Quilon (Travancore) (Native state section) (3′ 3⅜″ gauge)	0·43	57·62	58·05
Total	1,295·02	73·06	1,368·08

20 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—

The line from Negapatam to Erode was commenced in May 1859 by the late Great Southern of India Railway Company and was completed on the 5′ 6″ gauge. It was converted to the 3′ 3⅜″ gauge in sections as follows:—Negapatam to Trichinopoly, June and July 1875; Trichinopoly to Karur, July 1879; Karur to Erode, December 1879. The line from Arkonam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system and was completed on the 3′ 6″ gauge. It was converted to 3′ 3⅜″ gauge in July 1878.

On the 1st January 1891, the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal State railway, to a new Company called the "South Indian Railway Company, Limited," the whole now forming the South Indian railway.

The Pamban branch has been constructed with the object of placing the island of Rameswaram in communication with the South Indian railway system.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

20 (*a*) South Indian railway proper (5′ 3⅜″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
MADRAS-TUTICORIN SECTION—					1861	48
Main line—					1862	82
Madras (Beach Joint to Beach old)	1900	15-1-00	0·33		1863	82
Madras Beach old to Park		1-1-79	1·60		1864	82
Madras (Park) to Tindivanam	25-2-73	1-9-76	76·05		1865	99
Tindivaram to Cuddalore old town		1-1-77	52·01		1866	144
Cuddalore old town to Porto Novo		1-7-77	17·15		1867	160
Porto Novo to Chidambaram		1-10-78	6·73		1868	184
Chidambaram to Coleroon	12-6-74	1-7-79	4·57		1869	184
Coleroon to Shiyali		1-1-78	6·06		1870	184
Shiyali to Mayavaram		1-7-77	12·24		1871	184
Mayavaram to Tanjore		15-2-77	43·76		1872	184
Tanjore to Trichinopoly Junction	May 1859	11-3-62	31·14		1873	184
Trichinopoly Junction to Madura	2-8-72	1-9-75	96·04		1874	184
Madura to Tuticorin		1-1-76	98·71		1875	280
Tuticorin to Foreshore	1899	7-8-99	0·41		1876	473
Total Main line	...	...	...	446·80	1877	598
Branches—					1878	611
Arkonam branch—					1879	631
Chingleput to Walajabad	Nov. 1879	1-8-80	13·66		1880	645
Walajabad to Conjeeveram		1-1-81	7·94		1881	653
Conjeeveram to Arkonam	11-8-34	8-5-65	17·65		1882	653
			39·25		1883	654
					1884	654
Pondicherry branch—					1885	654
Villupuram to the Gingee river, inclusive of the bridge over the river	May 1879	15-12-79	16·47		1886	654
					1887	737
Nagore branch—					1888	737
Tanjore to Tiruvallur	May 1859	2-12-61	33·83		1889	737
Tiruvallur to Negapatam		15-7-61	14·33		1890	779
Negapatam to Nagore	11-11-98	1-12-99	4·67		1891	901
			52·83		1892	1,042
					1893	1,042
Pulliarpati Quarry branch—					1894	1,042
Tanjore to Pulliarpati quarry buffer end	1898	1-7-98	4·57		1895	1,042
					1896	1,042
Erode branch—					1897	1,042
Trichinopoly Junction to Fort	May 1859	11-3-62	2·52		1898	1,013
Trichinopoly Fort to Karur		3-12-66	44·65		1899	1,030
Karur to Kodumudi		1-7-67	16·70		1900	1,034
Kodumudi to Erode		1-1-68	23·54		1901	1,034
			87·41		1902	1,123
					1903	1,123
Pamban branch—						
Madura to Mandapam	21-4-99	1-8-02	89·50			
Tinnevelly branch—						
Maniyachi to Tinnevelly	2-8-72	1-1-76	18·28			
Wharf branch—						
Cuddalore old town to Wharf	1899	7-8-99	1·54			
Capper quarry branch—						
Junction with main line to Capper Quarry	1900	15-4-00	0·86			
Salt branch—						
Tuticorin to buffer end of Livingepuram	1899	12-11-99	2·39			
Total Branches	...	...	...	313·05		
TOTAL MADRAS-TUTICORIN SECTION	...	...	...	759·85		
VILLUPURAM-DHARMAVARAM SECTION—						
Main line—						
Villupuram to Tiruvannamalai	Nov. 1888	17-11-90	41·80			
Tiruvannamalai to Pakala		18-3-91	96·55			
Pakala to Vayalpad		1-1-92	46·69			
Vayalpad to Dharmavaram		1-3-92	94·14			
Total Main line	...	...	...	279·18		
Branch—						
Gudur branch—						
Pakala to Tirupati West	Nov. 1888	18-3-91	25·05			
Tirupati West to Gudur	15-11-83	15-9-87	59·05			
Total Branch	...	...	...	84·10		
TOTAL VILLUPURAM-DHARMAVARAM SECTION	...	...	...	363·28		
TOTAL OPEN MILEAGE, SOUTH INDIAN PROPER	...	...	...	1,123·13		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Pamban branch—						
Tiruppachetti to Sivaganga	21-4-99	...	9·00			
Total Lines under construction	...	...	...	9·00		
GRAND TOTAL, SOUTH INDIAN PROPER	...	...	...	1,132·13		

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$ **SOUTH INDIAN RAILWAY SYSTEM**—*contd.*

20 (*a*) South Indian railway proper (5′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The main line from the Beach station at Madras to Tuticorin is laid with 50 lb. steel rails on cast iron pot sleepers; the rest of the line is laid with various descriptions of rails and sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is fenced with aloe and wire (with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Pamban branch which are only fenced at stations).

Curves.—There are only 1·19 miles of curves with radii of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200 except on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Trichinopoly-Erode sections where it is 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:—

Terms of contract.—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock, which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required to be provided either by the Secretary of State, or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

*Company's stock at date of purchase	£
... ...	3,208,280
Premium	989,277
	4,197,557

Currency of contract.—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe their obligations, or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract, Government are to take possession of the railway and all its appliances, repaying at par to the Company their capital of £1,000,000 and any further capital raised by them and paid to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of—the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital, at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company and at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamban branch and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Table II*. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1861	...	...	...	...	...	...	...	77	47·45
1862	...	...	...	...	...	...	...	61	44·43
1863	...	...	...	...	...	...	...	24	44·60
1864	...	...	...	...	...	...	...	69	57·55
1865	...	...	...	...	...	...	...	79	49·53
1866	...	...	...	...	...	...	...	106	49·28
1867	...	...	...	...	...	...	...	86	49·66
1868	...	...	...	...	...	...	...	90	48·64
1869	...	...	...	...	...	...	...	84	64·44
1870	...	...	...	...	...	...	...	84	62·10
1871	...	...	...	...	...	...	...	84	55·61
1872	...	...	...	...	...	...	...	87	56·87
1873	...	...	...	...	...	...	...	120	49·99
1874	...	...	...	...	...	...	...	101	60·81
1875	...	...	...	...	...	...	...	96	48·16
1876	...	...	...	...	...	...	...	90	58·27
1877	...	...	...	...	...	...	...	107	50·88
1878	...	...	...	...	...	...	...	102	66·65

* Includes the Pondicherry railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM**—*contd.*

20 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—*concld.*

Statistics of working—*concld.*

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Table I.*							Table II.†	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	4,41,96,588	33,62,067	10,63,253	2·40	20,95,206	...	−10,31,953	105	68·38
1880	4,46,77,075	35,59,593	9,30,017	2·08	21,28,643	...	−11,98,626	106	73·87
1881	4,52,22,730	37,55,688	12,37,726	2·73	21,30,568	...	−8,92,842	109	67·04
1882	4,53,69,280	37,58,714	14,02,328	3·09	21,40,871	...	−7,38,543	109	62·69
1883	4,53,97,614	38,69,668	13,22,334	2·91	21,46,579	...	−8,24,245	112	65·33
1884	4,67,51,662	41,89,049	14,92,491	3·19	25,40,471	...	−10,47,980	122	64·18
1885	4,93,74,900	45,60,126	15,81,714	3·20	27,02,145	...	−11,20,431	132	65·12
1886	5,15,40,172	49,20,176	13,75,914	2·66	29,80,496	...	−15,04,582	143	69·78
1887	5,40,64,399	51,79,324	15,86,729	2·89	31,25,720	...	−15,38,991	148	69·20
1888	5,57,91,978	56,58,688	16,31,692	2·92	33,80,057	...	−17,48,365	159	68·98
1889	6,25,01,688	59,39,378	17,63,111	2·82	35,29,935	...	−17,66,824	167	70·11
1890	7,27,15,494	64,25,510	26,67,305	3·66	35,19,564	1,43,341	−9,95,600	181	57·50
1891	7,72,11,805	70,36,756	23,58,724	3·05	35,89,736	...	−12,31,012	154	65·47
1892	7,82,83,761	77,14,996	27,77,005	3·55	39,51,093	...	−11,74,088	137	63·01
1893	7,63,31,043	80,92,415	30,34,332	3·98	38,58,152	...	−8,23,820	149	61·25
1894	7,64,13,362	80,46,559	32,83,865	4·30	42,81,812	1,06,449	−11,04,396	148	58·99
1895	7,68,38,604	89,14,947	38,96,987	5·07	42,27,578	2,55,274	−6,85,862	165	56·13
1896	7,67,63,325	89,45,581	40,27,489	5·25	40,60,477	2,51,567	−2,84,755	165	54·89
1897	7,66,46,858	91,81,409	42,96,757	5·61	38,76,142	3,25,390	+ 95,225	170	53·01
1898	7,45,21,878	84,67,581	38,35,527	5·15	37,49,521	3,06,473	−2,20,467	157	54·30
1899	7,53,82,628	84,74,462	39,83,540	5·29	36,39,391	2,45,608	+ 98,041	159	52·41
1900	7,69,70,119	89,04,825	43,97,986	5·71	36,77,879	3,68,408	‡+3,51,629	166	50·27
1901	8,23,78,918	1,01,44,657	54,15,176	6·57	37,23,736	4,59,540	+12,31,900	188	46·17
1902	8,49,97,226	1,05,08,282	57,14,254	6·72	39,64,367	4,80,185	+12,69,702	189	45·60
1903	8,69,72,143	1,23,82,517	73,77,644	8·48	40,28,063	6,96,450	+26,53,126	203	39·99

20 (*b*) Karaikkal-Peralam railway (3′ 3⅜″ gauge)—

The line is partly in British and partly in French territories and was constructed with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Karaikkal to Peralam	July 1895	14-3-98	14·65	14·65

Details of construction—

Permanent-way.—13·20 miles are laid with 41 lb. steel rails on wooden sleepers and the remainder with 41 lb. steel rails on steel transverse sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is only fenced at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked on the same percentage of working expenses to gross earnings as obtains on the undertaking, plus 5 per cent. on the gross receipts of the line for the use of the main line rolling-stock and Rs. 1,500 per annum for interest on the main line Revenue stores and Stores and workshop buildings and machinery. If at any time the Company can show that the working of the railway involves an actual loss on the percentage terms, the Government of the French Settlements in India has to make good the loss.

Rates and fares.—Same as on the South Indian Railway system.

* Includes the Tinnivelly-Quilon (Travancore) railway (British section).

† Includes the Pondicherry railway.

‡ The gain in 1900 was due to the opening of 131 miles of new line.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$ **SOUTH INDIAN RAILWAY SYSTEM**—*contd.*

20 (*b*) Karaikkal Peralam railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year	Table I: Capital outlay to end of each year.	Table I: Gross earnings.	Table I: Net traffic receipts.	Table I: Per cent. on capital outlay.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	4,759	...	...	...	...	...
1896	59,009	...	...	...	...	...
1897	5,93,082	...	...	...	...	...
1898	7,21,665	19,738	7,855	1·09	27	60·19
1899	7,25,344	27,685	9,037	1 25	37	67·36
1900	7,29,715	24,606	9,478	1·30	32	61·48
1901	7,23,786	30,450	13,314	1·84	40	56·28
1902	7,23,786	32,736	14,619	2·02	43	55·34
1903	7,23,786	38,933	19,864	2·74	51	48·98

20 (*c*) Pondicherry railway (3′ 3⅜″ gauge)—

The line is in French territory and was constructed with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Left bank of Gingee river to Pondicherry	June 1878	15-12-79	7·85	7·85

Details of construction—

Permanent-way.—0·55 mile is laid with 50 lb. bull headed steel rails on pot sleepers, 8·53 miles with 41 lb. steel rails on wooden sleepers and the remainder with 40 lb. iron rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing—The line is fenced with aloe and wire fencing.

Curves.—There is only 0·26 mile of curves with radii of less than 1,000 feet.

Gradients.—The raling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows :—

Currency of contract.—The contract will be terminable by either party, on giving 6 months' notice expiring on the 31st December in any year.

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fares.—Same as on the South Indian railway.

Statistics of working—

Calendar year.	Table I: Capital outlay.	Table I: Gross earnings.	Table I: Net traffic earnings.	Table I: Per cent. on capital outlay.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.
	Rs.	Rs.	Rs.			
1879 to 1889	Information not available.					
1890	5,68,543	...	...	...	Included with the South Indian railway proper.	
1891	5,68,543	20,106	20,107	3·54		
1892	5,68,543	15,341	15,341	2·70		
1893	5,68,543	18,014	18,014	3·17		
1894	5,68,543	27,958	18,425	3·24		
1895	5,68,543	50,328	22,711	3 99		
1896	5,68,543	39,681	17,776	3·13		
1897	5,68,543	36,592	17,169	3·02		
1898	5,68,543	31,830	14,394	2 53		
1899	5,68,543	45,305	21,627	3·80		
1900	5,68,545	59,583	23,193	4·08		
1901	5,68,543	60,174	32,366	5·69		
1902	5,68,543	70,478	37,960	6·68		
1903	5,68,543	73,416	44,258	7·78		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

20 (*d*) Tanjore District Board railway (3' 3⅜" gauge).—

The money for this railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money, either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by guaranteeing a company.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mayavaram to Tiruvallur	10-8-91	2-4-94	54·08		1894	54
Tiruvallur to Mutupet	June 1890				1895	54
Mutupet to Pattukkottai	15-11-00	20-10-02	17·03		1896	54
Pattukkottai to Arantangi	15-11-00	31-12-03	28·35		1897	54
Total open mileage	...	...	...	99·46	1898	54
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					1899	54
Thambikkottai salt siding	15-11-00	...	0·63		1900	54
Adirampatnam salt siding		...	1·00		1901	54
Arantangi quarry branch		30-6-04*	3·90		1902	71
Total Lines under construction	...	...	...	5·53	1903	99
GRAND TOTAL	...	...	...	104·99		

Details of construction—

Permanent-way.—Twenty-seven miles are laid with 41 lb. steel rails on wooden sleepers and the remainder with 40 lb. iron rails on wooden sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is only fenced at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200 except in one place where it is 1 in 160.

Terms of contract—

The railway is worked with the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Land was provided free of cost.

Terms of contract—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900, the Tanjore District Board took over the Government section and became sole owners, the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued, and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances, this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) *plus* 5 per cent. on the gross receipts of the line for use of rolling-stock, and in addition all other charges properly debitable to revenue.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

* Probable date of opening.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads } (a) \text{ to } (f)}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

20. (*d*) Tanjore District Board railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1890	61,509	...	...	...	1,230	—1,230	...	...
1891	4,82,149	...	...	...	16,673	—16,673	...	...
1892	13,84,423	...	...	...	37,331	—37,331	...	...
1893	21,62,957	...	...	...	70,947	—70,947	...	...
1894	23,79,123	1,63,460	62,942	2·65	1,00,701	—37,759	103	61·50
1895	24,47,438	2,42,024	93,669	3·83	95,700	—2,031	86	61·30
1896	24,49,680	2,47,772	99,361	4·06	97,861	+1,500	88	59·90
1897	24,91,854	2,66,081	1,11,496	4·47	99,159	+12,337	95	58·19
1898	24,94,905	2,46,199	77,627	3·11	99,843	—22,216	88	68·47
1899	24,97,355	2,42,016	96,798	3·88	99,845	—3,047	86	60·01
1900	26,50,776	2,32,280	97,782	3·69	1,02,734	—4,952	83	32·02
1901	32,17,511	2,90,637	1,35,765	4·22	1,38,851	—3,076	103	53·29
1902	38,18,202	3,08,879	1,46,764	3·84	1,63,157	—16,393	103	52·48
1903	45,70,190	3,90,747	2,09,167	4·58	1,97,476	+11,691	106	46·47

20. (*e*) Tinnevelley-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Tinnevelly to Kallidaikurichi	21-4-99	1-6-02	19·05		1902	19
					1903	49
Kallidaikurichi to the British frontier near Shencottah	21-4-99	1-8-03	30·45			
TOTAL OPEN MILEAGE	...	...	...	49·50		
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Under construction in the British territory	21-4-99	...	0·91			
Total line under construction	...	...	...	0·91		
GRAND TOTAL	...	...	...	50·41		

Details of construction—

Permanent-way.—The line is laid with 50 lb. bull headed steel rails on cast iron pot sleepers except 0·27 mile in the Tinnevelly station yard, which is laid with 40 lb. iron rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is only fenced at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150 except on the Kila Kadaiyam-Ambasamudram section, where it is 1 in 100.

Terms of contract—

The Travancore branch is worked under the following contract :—

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked on the same percentage of working expenses to gross earnings as obtains on the undertaking subject to the maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 20}{\text{Sub-heads } (a) \text{ to } (f)}$. **SOUTH INDIAN RAILWAY SYSTEM—*concld.***

20. (*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore, the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency met by the Native State.

Statistics of working—

Calendar year.	Table I.	Table II.	
		Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
1902	Included with the South Indian railway proper	81	44·84
1903		101	41·18

20. (*f*) Tinnevelly-Quilon (Travancore) Native state section (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Open in Travancore State	15-5-99	1-3-03	0·43			
Total open mileage	...	...		0·43		
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.						
Quilon to Ponalur Ponalur to the Frontier of the Travancore State near Shencottah	21-4-99	*	57·62	57·62	1903	1
Grand Total	...	...	...	58·05		

The line is to be worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) (British section).

Number $\frac{\text{Main head } 21}{\text{Sub-heads } (a) \text{ to } (j)}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—**

Lines comprising system.—The Southern Mahratta railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Southern Mahratta railway (3′ 3⅜″ gauge)	1,042·04	...	1,042·04
(*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)	37·92	...	37·92
(*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)	119·50	...	119·50
(*d*) Hindupur (Yesvantpur-Mysore frontier) railway (3′ 3⅜″ gauge)	51·35	...	51·35
(*e*) Kolhapur railway (3′ 3⅜″ gauge)	29·27	...	29·27
(*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)	15·80	...	15·80
(*g*) Mysore section (Southern Mahratta) (3′ 3⅜″ gauge)	296·22	...	296·22
(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·11	...	51·11
(*i*) *Bellary-Rayadrug railway (3′ 3⅜″ gauge).*	...	33·00	33·00
(*j*) *Hospet-Kottur railway (3′ 3⅜″ gauge)*	...	44·10	44·10
Total	1,643·21	77·10	1,720·31

Running powers—

Home line over Foreign line:—

Tadepalli to Bezwada, Madras (North-East line) railway . . . . . 2·99

* Probable date of opening, Quilon to Ponalur, 1st June 1904, and Ponalur to Shencottah, 1st August 1904.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

(For Index see page 168.)

Number Main head 21 / Sub-heads (*a*) to (*j*). **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21. (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—					1884	214
Frontier to Castle Rock	...	3-2-88	3·63		1885	316
Castle Rock to Deuli	...	15-6-87	2·75		1886	477
Deuli to Dharwar	...	24-1-87	56·00		1887	849
Dharwar to Hospet	Bellary to Hubli, Nov. 1881	1-7-85	101·25		1888	854
					1889	979
Hospet to Bellary		24-3-84	40·51		1890	1,043
Bellary to Guntakal*		16-5-87	29·99		1891	1,044
Guntakal to Nandyal		11-7-87	90·25		1892	1,044
					1893	1,044
Nandyal to Cumbum	26-9-83	15-6-90	63·18		1894	1,042
					1895	1,042
Cumbum to Tadepalli		3-10-89	122·41		1896	1,042
					1897	1,042
Total Main line	...	...	...	509·97	1898	1,042
					1899	1,042
					1900	1,042
					1901	1,042
					1902	1,042
					1903	1,042
Branches—						
Harihar branch—						
Hubli to Harihar (temporary station)	...	18-10-86	81·00	...		
Temporary station to permanent station	...	21-2-89				
Bijapur branch—						
Gadag to Hotgi	April 1879	1-8-84	173·08	...		
Poona branch—						
Londa to Belgaum	...	21-3-87	33·00	...		
Belgaum to Miraj	29-11-83	22-12-87	85·01	...		
Miraj to Koregaon		2-5-87	76·00	...		
Koregaon to Ghorpuri		18-11-86	83·07	...		
Ghorpuri to Poona		4-10-90	0·91	...		
			277·99	...		
Total Branches	...	...	...	532·07		
GRAND TOTAL	...	...	...	1,042·04		

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails on wooden and steel sleepers, except for the portion from the Portuguese Frontier to Castle Rock which is laid with 62 lb. double headed rails. Between Gadag and Hotgi, the rails are 41½ lb. steel and iron mixed. 50 lb. flat-footed steel rails are being used for renewals.

Ballast.—The line is ballasted throughout.

Tunnels.—See appendix 37.

Bridges.—See appendix 36.

Fencing.—The line is only partially fenced with wire and vegetable fencing and at some places on the Poona branch with stone walls.

Curves.—The sharpest curves have radii varying from 600 to 955 feet.

Gradients.—The ruling gradient is 1 in 100 with 1 in 40 on the Ghat incline between miles 0 and 3.

Terms of contracts—

The Southern Mahratta railway is worked under the following contracts :—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

* This was originally a branch of the Madras railway (5′ 6″ gauge) the dates of opening being : Guntakal to Virapur 16th January 1871 ; Virapur to Bellary, 1st March 1871, but was subsequently made over to the Southern Mahratta Railway Company on 1st February 1887 and converted from 5′ 6″ to 3′ 3⅜″ gauge on the 16th May 1887.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

(For Index see page 168.)

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows:—

Government aid.—Interest in sterling on share capital at 3½ per cent. is guaranteed and an additional ½ per cent. until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contracts.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (*i. e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the company fail to observe their obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice Government is to repay to the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts.—The Company may determine the contracts on the 30th June in any year, by giving one year's previous notice.

Terms of working—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work' subject to a maximum charge on such account of Rs. 23,000 in each half year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts belonged to government unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890, three-fourths of the net receipts go to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1884	2,77,07,721	2,13,059	—18,131	...	14,77,196	...	—14,95,327	50	108·51
1885	3,63,00,076	8,66,226	1,40,238	0·38	19,81,340	...	—18,41,102	62	83·80
1886	6,15,07,620	16,94,918	4,88,392	0·79	26,43,220	...	—21,54,828	92	69·83
1887	7,87,73,165	30,32,417	10,08,624	1·27	34,64,086	...	—24,60,462	87	66·91
1888	8,68,81,228	38,38,616	8,85,493	1·01	31,89,505	...	—23,04,012	96	75·70
1889	9,18,52,138	40,31,604	9,61,618	1·04	32,91,520	41,700	—23,71,602	98	76·15
1890	9,32,85,016	44,71,095	9,14,664	0·98	31,39,444	30,036	—22,54,816	85	73·19
1891	9,42,66,041	47,60,567	16,29,919	1·72	35,89,851	2,58,845	—22,18,777	88	65·76
1992	9,61,10,671	44,33,107	13,47,999	1·40	31,55,571	3,43,266	—21,80,778	82	68·69
1893	9,45,71,662	57,29,918	23,16,567	2·45	35,42,479	5,84,949	—17,60,861	106	59·60
1894	9,51,44,496	58,50,542	20,18,567	2·12	45,87,598	5,57,556	—31,26,587	108	65·44
1895	9,56,02,591	64,68,011	25,88,948	2·71	46,80,290	5,22,407	—26,13,740	119	59·65
1896	9,60,94,788	67,12,230	29,11,959	3·03	44,45,740	7,23,698	—22,57,479	124	56·59
1897	9,67,12,838	64,92,310	27,82,625	2·88	42,62,886	6,97,133	—21,77,394	119	56·96
1898	9,74,67,550	50,61,871	15,02,414	1·54	41,10,275	5,44,277	—31,52,138	93	70·32
1899	9,78,60,569	58,70,616	18,95,002	1·94	40,10,557	3,85,332	—25,00,887	108	67·72
1900	9,82,62,274	64,66,526	22,88,366	2·32	40,02,119	5,81,807	—23,00,560	119	64·69
1901	9,84,64,118	58,29,471	17,91,134	1·75	40,42,851	4,92,728	—28,04,445	107	70·30
1902	9,85,13,731	64,59,686	23,09,908	2·34	40,79,645	5,03,168	—22,72,905	119	64·24
1903	9,88,51,177	66,72,302	25,50,721	2·58	40,94,983	6,01,133	—21,45,393	123	61·77

21 (*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Birur to Shimoga	12-8-96	1-12-99	37·92	37·92

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. steel rails laid on wooden sleepers. The Bhadra bridge is laid with 50 lb. steel rails.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced except for a very short length.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 89.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

(For Index see page 168.)

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$ **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—

The Hindupur and Birur-Shimoga railways are worked under the following contract :—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract, the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway and the working stores belonging to the railway at a valuation.

Terms of working.—The working expenses of the system excluding expenditure on New Minor Works are divided between these railways and the others, comprising the system in proportion to their gross earnings. The Company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000 or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Mysore Durbar.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,90,226	...	...	...	...	...
1897	6,27,263	...	...	...	...	...
1898	15,70,079	...	...	...	...	...
1899	20,85,475	6,186	1,381	0·09	37	69·59
1900	22,94,457	66,227	24,219	1·06	34	63·43
1901	24,01,338	62,058	16,993	0·71	31	72·62
1902	24,05,667	64,606	23,367	0·97	33	63·83
1903	24,07,802	61,520	24,206	1·01	31	60·65

21 (*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Guntakal to Dharmavaram	June 1889	1-3-92	62·95		1892	63
Dharmavaram to Hindupur	26-1-91	23-4-93	49·28			
Hindupur to Mysore Frontier	August 1891	17-9-93	7·27		1893 to 1903	119
Total	...	...	...	119·50		

Detail of construction—

Permanent-way.—The permanent way consists of 41¼ lb. flat-footed steel rails laid on steel sleepers.

Ballast.—The line is ballasted throughout with stone.

Bridges.—See Appendix 36.

Fencing.—The line is partially fenced with wire.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Guntakal-Mysore Frontier railway is worked under the following contract :—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—The line is the property of Government.

Currency of contract.—The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract.—The same as in the case of the Southern Mahratta railway.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway) exclusive of Government supervision charges of the Southern Mahratta Railway and the Mysore section are divided between this railway and the other railways worked, in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1893	58,39,806	1,97,874	78,955	1·35	4,67,933	−3,88,978	38	60·00
1894	58,58,414	3,68,951	1,27,874	2·18	2,34,529	−1,06,655	59	65·34
1895	58,71,739	4,39,329	1,81,657	3·09	2,34,639	−52,982	71	58·63
1896	59,00,158	4,80,992	2,10,690	3·57	2,35,666	−24,926	77	56·20
1897	59,02,498	6,38,278	2,75,983	4·68	2,36,000	+39,983	103	56·76
1898	58,98,866	4,25,702	1,32,471	2·25	2,36,026	−1,03,555	69	68·88
1899	58,98,608	3,84,829	1,28,459	2·18	2,35,996	−1,07,537	62	66·62
1900	59,00,046	4,36,116	1,57,837	2·68	2,35,960	−78,123	70	63·81
1901	59,02,583	4,47,313	1,86,659	2·32	2,36,115	−99,456	72	69·45
1902	59,04,714	4,73,972	1,74,320	2·95	2,36,107	−61,787	76	63·22
1903	59,07,192	4,96,481	1,97,075	3·34	2,36,227	−39,152	80	60·31

21 (*d*) Hindupur (Yesvantpur-Mysore frontier) railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.	Miles.	Miles.
Yesvantpur to Dodballapur	March 1890	15-12-92	19·93		1892, 1893 to 1903	20
Dodballapur to Mysore Frontier		17-9-93	31·42			51
Total	...	...	...	51·35		

Details of construction—

Permanent-way.—The rails on the ghat section, 11 miles in length, are of the State railway type, weighing 50 lb. to the yard and 41½ lb. to the yard on the remainder of the line. The sleepers are of Mysore teak throughout.

Ballast.—The line is ballasted throughout.

Fencing.—The line is fenced throughout, mostly with vegetable fencing.

Curves.—The sharpest curve has a radius of 603 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	24,41,741	...	...	...	...	...
1893	24,46,186	57,635	22,708	0·93	38	60·60
1894	24,34,999	1,61,704	56,504	2·32	61	65·06
1895	24,19,698	1,92,159	79,886	3·30	72	58·43
1896	23,94,762	2,23,800	99,592	4·16	84	55·50
1897	24,79,210	2,69,527	1,18,358	4·77	101	56·09
1898	24,98,316	1,80,081	56,430	2·26	67	68·66
1899	24,98,162	1,49,363	50,528	2·02	56	66·17
1900	24,98,047	1,88,183	67,135	2·69	70	64·32
1901	24,94,729	1,97,798	60,724	2·43	74	69·30
1902	24,97,811	2,13,486	77,908	3·12	80	63·51
1903	24,97,206	2,42,695	96,159	3·85	91	60·38

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*e*) Kolhapur railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Kolhapur to Miraj	February 1888	21-4-91	29·27	29·27

Details of construction—

Permanent-way.—The permanent-way consists of 41½lb. flat-footed steel rails laid on steel sleepers.
Ballast.—The line is ballasted throughout.
Fencing.—The line is unfenced except for a very short length.
Curves.—There are no curves with a radius of less than 1,000 feet.
Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Kolhapur railway is worked under the following contract:—
Contract of—17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.
The general conditions of the contract are as follows:—
Government aid.—The line is the property of the Kolhapur State.
Currency of contract.—The contract may be terminated, upon six months' notice, by either party.
Terms of working.—The working expenses of the system excluding Government supervision charges and New Minor Works are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Kolhapur Durbar.
Rates and fares.—The same as in force on the Southern Mahratta railway.

Statistics of working—

TABLE I.				TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1889	13,59,602	...	...	...	...	...
1890	21,37,699	...	...	...	...	...
1891	23,16,183	58,331	20,866	0·90	60	64·26
1892	23,81,946	90,398	29,182	1·23	55	67·72
1893	23,21,687	1,88,096	49,991	2·15	78	57·67
1894	23,05,817	1,23,390	43,632	1·89	82	64·64
1895	23,69,206	1,21,147	51,006	2·15	80	57·90
1896	23,05,912	1,21,655	54,305	2·35	80	55·36
1897	23,24,837	94,630	41,981	1·80	63	55·04
1898	23,24,807	78,271	24,201	1·04	52	69·08
1899	23,24,807	99,195	33,986	1·46	66	65·74
1900	23,24,807	1,24,215	44,875	1·93	82	63·87
1901	23,24,807	1,14,114	35,750	1·54	75	68·67
1902	23,25,587	1,23,913	46,407	2·00	81	62·55
1903	23,26,188	1,21,957	48,053	2·07	80	60·60

21 (*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mysore to Nanjangud	...	1-12-91	15·04		1891 to 1898	15
Nanjangud station to Nanjangud town	...	12-7-99	0·76		1899 to 1903	16
TOTAL	...	...	...	15·80		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. steel rails laid on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is partially fenced with wire.

Curves.—The sharpest curve has a radius of 700 feet.

Gradients.—The ruling gradient is 1 in 89.

Terms of contract—

The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination, the Company make over to the Mysore Government the railway and works and pay to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed, to be taken over by the Mysore Government at a valuation.

Terms of working.—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of this railway is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares.—To be fixed by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	5,92,414	16,478	6,163	1·03	21	62·60
1893	6,16,551	33,812	14,001	2·26	43	58·59
1894	6,03,095	37,448	12,866	2·13	47	65·65
1895	6,09,212	39,100	16,432	2·69	49	57·98
1896	6,09,681	39,322	17,125	2·81	50	56·45
1897	6,34,764	33,497	14,265	2·25	42	57·41
1898	6,43,821	31,493	10,124	1·57	40	67·85
1899	6,46,051	16,810	5,671	0·88	21	66·26
1900	6,53,741	30,860	11,357	1·74	38	63·20
1901	6,56,462	26,302	7,863	1·20	35	72·22
1902	6,56,462	29,870	10,938	1·67	36	63·38
1903	6,56,462	31,923	12,687	1·93	39	60·26

21 (*g*) Mysore Section (Southern Mahratta) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mysore to Mandya	20-9-77	25-2-82	27·97		1881	58
Mandya to Channapatna		20-3-81	28·25		1882	86
Channapatna to Bangalore		1-2-81	34·75		1883	87
Bangalore to Tumkur	6-10-82	11-8-84	43·00		1884	140
Tumkur to Gubbi	18-1-84	26-12-84	11·00		1885	140
Gubbi to Birur	...	12-8-89	76·57		1886	140
Birur to Harihar	...	21-2-89	79·68		1887	140
					1888	140
TOTAL	...	...	...	296·22	1889 to 1903	296

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 21 / Sub-heads (a) to (j). **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*g*) Mysore Section (Southern Mahratta) (5′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists mainly of 41¼ lb. steel rails laid on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is only partially fenced with vegetable and wire fencing.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100; and 1 in 70 between Bangalore and Mysore.

Terms of contract—

The Mysore section is worked under the following contract :—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenanceand working.

The general conditons of the contract are as follows :—

Government and.—Guarantee of interest in sterling at 4 per cent. on £ 1,200,000 debenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £ 1,224,000, by the issue of debenture stock for the nominal amount of £ 1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may detetmine the contract at any time, on six months' notice should the Company fail to observe their obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Table II. Earnings per mile per week.	Table II. Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	7,98,213	...	...	...	23,960	...	—23,960	...	...
1880	21,37,736	...	...	...	68,908	...	—68,908	...	...
1881	36,56,345	1,31,525	53,753	1·47	98,912	...	—45,159	51	59·13
1882	45,95,058	2,88,390	1,03,495	2·25	1,68,989	...	—65,494	68	64·11
1883	57,69,057	3,02,895	99,675	1·73	2,19,351	...	—1,19,676	67	67·09
1884	62,64,620	3,61,448	1,65,479	2·64	2,41,052	...	—75,573	67	54·22
1885	64,89,346	4,33,954	2,07,784	3·20	2,51,730	...	—43,946	60	52·12
1886	71,35,111	4,69,274	1,05,385	1·48	5,57,104	...	—4,51,719	65	59·04
1887	91,36,438	5,13,784	1,41,198	1·55	6,70,864	...	—5,29,666	71	71·60
1888	1,25,76,692	5,70,657	52,295	0·42	6,94,210	...	—6,41,915	79	76·28
1889	1,24,24,093	8,96,273	2,22,034	1·54	7,07,500	47,964	—5,33,330	72	75·23
1890	1,47,11,610	11,86,318	2,61,700	0·02	6,48,738	52,831	—4,39,864	77	77·94
1891	1,50,76,285	13,24,525	4,43,717	2·94	6,54,850	96,004	—3,07,137	86	66·50
1892	1,46,36,205	13,99,463	4,47,906	3·06	7,29,621	1,91,305	—3,83,023	89	67·92
1893	1,46,42,217	16,83,203	6,74,705	4·61	7,70,439	1,64,670	—2,60,404	109	59·92
1894	1,47,60,293	14,45,412	4,76,156	3·23	8,38,525	1,43,566	—5,05,935	94	66·99
1895	1,49,22,452	15,78,231	6,30,769	4·23	8,70,947	1,23,096	—3,63,274	103	59·72
1896	8,51,08,257	15,84,981	6,76,873	4·48	8,21,588	1,71,768	—3,16,483	103	57·29
1897	1,51,99,757	18,80,019	7,95,147	5·23	7,75,708	1,80,992	—1,61,553	122	57·54
1898	1,55,07,819	13,92,851	4,13,421	2·67	7,38,461	1,66,986	—4,92,026	90	70·32
1989	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	76,861	—4,68,945	69	68·97
1900	1,58,70,510	13,76,391	4,71,201	2·97	7,18,200	1,11,070	—3,58,069	89	65·77
1901	1,60,14,879	14,33,240	4,07,791	2·55	7,22,224	1,07,697	—4,22,150	93	71·55
1902	1,60,76,009	15,97,046	5,58,082	3·47	7,21,062	1,16,979	—2,79,959	104	65·00
1903	1,62,24,903	15,35,270	5,82,298	3·59	7,20,000	1,46,896	—2,84,598	100	62·07

APPENDIX 38—*contd.*

[Appendices 4 (portion) 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

21 (*h*) West of India Portuguese railway (3′ 3⅜″ gauge)—

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mormugao to Sonauli	18-4-88	17-1-87	41·00		1887	41
Sonauli to the Portuguese frontier		3-2-88	10·11		1888 to 1903	51
Total	...	...	...	51·11		

Details of construction—

Permanent-way.—The permanent way throughout is of 62 lb. State railway type with ten sleepers to the rail. The sleepers used are creosoted pine, sal, teak and jamba.

Ballast.—The line is ballasted with laterite and blue stone.

Tunnels.—See Appendix 37.

Fencing.—The line is partially wire fenced.

Curves.—The sharpest curve has a radius of 720 feet.

Gradients.—The ruling gradient is 1 in 100 with 1 in 40 on the Ghat section.

Terms of contracts—

The West of India Portugese railway is worked under the following contracts:—

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Purtuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows:—

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £ 800,000 and 6 per cent. on £ 550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery station appliances and stores. The contract of 1902, between the Southern Mahratta and West of India Portuguese Railway Companies which took effect from the 1st July 1902 is to continue in force, for five years subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract.—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company can at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on their capital. On surrender of the contract, the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and Southern Mahratta railways are worked as one concern and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao and the amount to be charged for working to be the actual expenses of working and maintenance *plus* 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of

APPENDIX 38—*contd.*

[Appendices A (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*concld.***

21 (*h*) West of India Portuguese (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

Statistics of working—

Calendar year.	Table I. Capital outlay. to end of each year.	Gross earnings.	Net traffic receipts.	Per cent on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	1,63,14,170	4,75,497	67,001	0·41	138	74·24
1891	1,63,22,139	5,44,014	1,21,583	0·74	157	86·01
1892	1,63,00,901	3,74,681	11,107	0·07	109	106·01
1893	1,62,74,816	5,86,705	1,65,069	1·01	168	78·13
1894	1,63,12,313	5,45,679	1,19,332	0·73	157	86·47
1895	1,63,31,966	5,33,077	1,12,186	0·69	166	90·75
1896	1,63,80,441	2,97,176	—78,893	...	90	137·34
1897	1,63,40,168	1,79,722	—1,60,785	...	55	189·46
1898	1,62,97,448	2,20,870	—1,10,145	...	65	173·60
1899	1,62,96,432	5,72,475	1,64,665	1·01	157	83·15
1900	1,63,29,262	3,33,596	—66,845	...	96	120·04
1901	1,63,42,023	3,68,120	—48,589	...	205	113·20
1902	1,63,08,793	3,54,657	51,387	0·37	133	85·51
1903	1,63,08,793	3,96,235	1,51,112	1·10	142	61·86

21 (*i*) Bellary-Rayadrug (3′ 3⅜″ gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bellary to Rayadrug	24-10-02	...	33·00	33·00

21 (*j*) Hospet-Kottur (3′ 3⅜″ gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Hospet to Kottur	24-10-02	...	44·10	44·10

The construction of the Bellary-Rayadrug and Hospet-Kottur railways has been sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the period of scarcity. (See also Madras railway system).

* Including outlay on Harbour works.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 22 / Sub-head (a) UDAIPUR-CHITOR RAILWAY (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Berach near Chitorgarh to Debari near Udaipur	Feb. 1894	1-8-95	60·39		1895 to 1897	60
Separate station at Chitorgarh	2-6-98	15-8-98	0·47			
Debari to Udaipur		25-8-99	6·44		1898	61
Total ...	...	...	...	67·30	1899 to 1903	67

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 30 feet long, laid on deodar sleepers.

Ballast.—The ballast consists of broken stone.

Fencing.—The line is fenced round stations only.

Curves.—On the Berach-Debari section, the sharpest curve is of 1,146 feet radius and is 0·54 mile in length; and on the extension from Debari to the Ahr river near Udaipur at the 61st mile, the sharpest curve has a radius of 820 feet and is 0·16 mile in length.

Gradients.—The ruling gradient is 1 in 120, except on the section Debari to Udaipur, where it is 1 in 100.

Terms of contract—

The line is owned and has been worked by the Udaipur State, since the 31st December 1897, prior to which date it was worked by the Bombay, Baroda and Central India railway as a temporary measure.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1893	7,000	...	...	...	...	...
1894	2,70,472	...	...	...	...	...
1895	13,39,350	54,702	18,778	1·40	42	65·67
1896	15,68,721	1,35,219	53,750	3·44	43	60·25
1897	15,99,040	1,23,175	42,881	2·68	39	65·19
1898	17,89,252	1,43,822	61,364	3·43	46	57·33
1899	19,89,912	2,10,540	1,04,829	5·27	62	50·21
1900	19,80,010	3,17,928	1,85,703	9·38	91	41·59
1901	20,61,858	2,22,175	94,112	4·56	63	57·65
1902	20,65,630	2,17,388	97,131	4·70	62	55·32
1903	20,66,171	1,72,817	66,446	3·21	51	62·63

Number Main head 23 / Sub-head (a) BARASET-BASIRHAT LIGHT RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Baraset to Basirhat	3-4-03	...	26·00	26·00

Details of construction—

The line is under construction.

Terms of contract—

The line will be worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement:—

Agreement—of 14th December 1897 (between the District Board of the 24 Purganas and the Baraset-Basirhat Light Railway Company).

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 23}}{\text{Sub-head (a)}}$ **BARASET-BASIRHAT LIGHT RAILWAY** (2′ 6″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions are as follows:—

Aid by District Board.—The District Board guarantees such an annual subsidy as will make the net profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and free use of District Road not exceeding 8 feet on one side. (The company to acquire land necessary for stations and diversions at its own expense.)

Currency of agreement.—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months' notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding together with a bonus of twenty per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital *plus* not more than 4 per cent. on debenture capital will be equally divided between the District Board and the company.

Rates and fares.—Certain maxima have been fixed within which the company is permitted to vary its rates.

Number $\frac{\text{Main head 24}}{\text{Sub-head (a)}}$ **BARSI LIGHT RAILWAY** (2′ 6″ gauge)—

	Open. Miles.	Under construction Miles.	Total Miles.
Mileage	21·59	57·37	78·96

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Barsi Road Junction to the town of Barsi.	1-8-95	1-3-97	21·59			
Total open mileage	...	...	...	21·59	1897 to 1903	22
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Barsi Road Junction to Pandharpur	6-1-98	*	30·67			
Barsi town to Tadwala	20-11-00	*	26·70			
Total, Lines under construction	...	...	...	57·37		
Grand Total	...	...	...	78·96		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 35 lb. to the yard, on steel sleepers.

Ballast.—Partly of broken stone and partly of hard moorum.

Fencing.—An efficient fencing is provided for a short distance on either side of level crossings, at bridges and round Barsi Road Junction and Barsi Town stations.

Curves.—There are four curves with radii of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Barsi Light railway is worked under the following contracts:—

Contracts of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

The general conditions of the contracts are as follows:—

Government aid.—The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction stations only. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contract on the 1st January 1924, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—The line is worked by the owning Company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

* Only the earth work has been thrown up as famine work.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7, and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 24 / Sub-head (a). BARSI LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	2,357	...	...	...	...	...
1896	10,06,657	...	...	...	...	...
1897	13,43,591	1,07,778	21,560	1·60	115	80·00
1898	13,42,592	1,80,321	24,559	1·83	116	81·15
1899	13,56,809	1,56,118	64,475	4·75	139	58·63
1900	13,56,501	1,24,440	42,440	3·13	111	65·90
1901	12,99,589	1,68,238	79,588	6·13	150	52·69
1902	13,18,242	1,50,275	52,879	4·02	134	64·81
1903	12,59,175	1,30,694	53,423	4·24	116	59·12

Number Main head 25 / Sub-head (a). BUKHTIARPORE-BEHAR LIGHT RAILWAY (2′ 6″ gauge)—

The line has been laid as far as possible on the District road.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bukhtiarpore on the East Indian railway to Behar	30-5-01	1-7-03	18·50	18·50

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails, on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Terms of contracts—

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement.—(Between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company.)

The general conditions are as follows:—

Government aid.—In addition to land, which has been provided free of charge, except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, *viz.*, upon the expiration of twenty-one years from the date of the order of the Local Government authorising the construction of the line by giving six months' notice, or at intervals of 7 years thereafter the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction, together with a bonus of 20 per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital, *plus* not more than 4 per cent. on debenture capital, will be equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1903	2,47,838	35,800	15,120	2·15	149	57·774

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 28 / Sub-head (a). CUTCH STATE RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Tuna-Anjar section—			Miles.	Miles.
Tuna to Anjar	26-8-03	...	11·86	11·86

The line is being constructed by His Highness the Rao Sahib of Cutch.

Number Main head 27 / Sub-head (a) DWARA-THERRIA LIGHT RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Dwara to Maolong	15-5-02	...	Miles. *13·50	Miles.
Maolong to Therria Ghat		...	†6·00	
Total . .	...	...	...	19·50

Details of construction—

The whole line is under construction.

Terms of contract—

The Dwara-Therria Light railway is being constructed by the promoter, Mr. G. L. Garth, and will be worked by the promoter or any Company which may be formed by him under—

Terms.—Contained in the Notification issued by the Chief Comissioner of Assam under No. 44, dated the 14th August 1902.

The general conditions are as follows:—

Government aid.—Land to be provided free of cost.

Currency of contract.—The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract, and take over the railway, with all its equipments, buildings and property, upon giving two years' previous notice, and on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares.—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Chief Commissioner.

Number Main head 28 / Sub-head (a). KALKA-SIMLA RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Kalka to Simla	29-6-98	9-11-03	Miles. 59·44	Miles. 59·44

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Tunnels.—See Appendix 37.

Fencing.—The line is only fenced across the Kalka camping ground and through the skirts of the town of Kalka.

Curves.—The sharpest curve is 120 feet in radius.

Gradients.—The ruling gradient is 1 in 33.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—29th June 1898.—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working.

15th November 1901.—Contract supplemental to that of 1898 (embodying terms for change of gauge).

20th January 1903.—Contract supplemental to that of 1898 (embodying terms for the advance of funds for the completion of the line).

The conditions of the contracts are as follows:—

Government aid.—Land provided free.

* Will probably be opened in the cold season of 1904.
† Commencement of work has not yet been authorised.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 28}}{\text{Sub-head (a)}}$. KALKA-SIMLA RAILWAY (2′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Terms of contracts.—The line was constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000. As the actual cost will, however, exceed this amount Government have arranged to lend the Company the requisite moneys at 4 per cent. interest owing to sufficient funds not being forthcoming in England.

Currency of contract.—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years from the date on which the railway has been opened for traffic throughout or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine, on giving notice, if the Company fail to comply with the obligations of the contracts. In the former case, Government will pay a sum equal to twenty-five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent., or not being less than the total capital in sterling expended. In the latter case, Government will pay the fair value of the railway and works.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), and the balance will represent net dividends for shareholders, subject to the payment of interest on moneys loaned from Government.

Rates and fares.—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunnels the Company can vary such rates within the maxima and minima.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	5,53,226	...	...	...	...	...
1900	13,18,465	...	...	...	...	...
1901	24,86,993	...	...	...	...	...
1902	92,81,656	...	...	...	...	...
1903	1,41,82,888	32,052	7,022	0·04	77	78·09

Number $\frac{\text{Main head 29}}{\text{Sub-head (a)}}$. MADURA DISTRICT LIGHT RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ammayanayakkanur to Kotagudi	30-5-99	...	55·00	
Periyakulam to Krishna-Manaik's Tope		...	5·00	
Theni to Karuvanath		...	33·00	
TOTAL	...	...	...	93·00

Messrs. Wilson and Company of Madras, the Promoters, were originally granted a concession for the construction of these lines under the Indian Tramways Act; but as there is no provision under this Act for payment of interest out of capital during construction, they submitted an amended application for a scheme for Light railways to be constructed under the provisions of the Indian Railways Act. The Promoters were informed that, subject to their acceptance of certain conditions, they might proceed to raise the necessary capital for the line. They accepted the conditions in July 1902 and are now negotiating a contract with the Madura District Board.

Number $\frac{\text{Main head 30}}{\text{Sub-head (a)}}$. MORVI RAILWAY (2′ 6″ gauge)—

This line is laid on the existing bridged and metalled road for the first 24 miles as far as Dolia and then runs along the line of unbridged and unmetalled road to Vankaner and on to Morvi and Rajkot. The conversion of the line to 3′ 3½″ gauge is in progress.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 30}}{\text{Sub-head (a)}}$. MORVI RAILWAY (2′ 6″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Wadhwan to Dolia	14-12-83	11-3-86	24·00		1885	51
Dolia to Vankaner		20-11-86	27·75		1886	68
Vankaner to Morvi		24-3-87	16·75		1887	68
					1888	68
Total Main line	...	...	...	68·50	1889 to 1903	94
Rajkot branch—						
Vankaner to Rajkot	10-5-88	1-1-90	25·25			
Extension across the Aji river to Rajkot junction with the Jetalsar-Rajkot railway.	6-1-94	6-8-94	0·61			
Total Branch	...	...	...	25·86		
Grand Total	...	...	...	94·36		

Details of construction—

Permanent-way.—The permanent-way originally consisted of steel rails, weighing 19 lb. to the yard, and pressed steel sleepers weighing 11 lb. These have since been extensively replaced in sections by 29 lb. and 41¼ lb. steel rails and creosoted pine sleepers. The line is now being relaid with 41¼ lb. steel rail on creosoted pine sleepers of 3′ 3⅜″ gauge dimension, to permit of the conversion to that gauge which is being undertaken. At present 24 miles of the Rajkot branch and the extension across the Aji river have been thus relaid.

Ballast.—The line is ballasted with Moorum (decayed trap) and sand.

Fencing.—The line is unfenced.

Curves.—There are 3·24 miles of curves with radii of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The Morvi Light railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1886	6,88,671	34,822	*	...	10	103·28
1887	11,06,500	1,29,407	16,994	1·54	39	86·87
1888	11,77,842	1,62,087	21,984	1·87	46	86·44
1889	18,90,548	1,77,321	56,726	3·00	50	68·01
1890	20,25,863	2,95,277	87,550	4·32	60	70·34
1891	20,55,599	3,09,419	1,08,617	5·28	63	64·90
1892	21,04,519	3,09,171	1,30,970	6·19	63	57·33
1893	21,57,365	3,22,817	1,45,752	6·75	66	54·86
1894	22,28,526	3,20,348	1,42,667	6·42	65	55·46
1895	23,99,396	3,69,972	2,00,127	8·34	75	45·91
1896	23,82,315	3,86,883	1,81,621	7·62	79	53·06
1897	24,76,757	4,27,484	2,11,642	8·55	87	50·49
1898	24,79,448	3,76,220	1,63,990	6·61	77	56·41
1899	25,06,414	4,20,486	1,70,053	6·78	86	59·56
1900	27,28,115	4,23,808	1,58,794	5·82	86	62·49
1901	27,59,452	3,58,663	1,25,534	4·55	73	65·00
1902	27,82,748	3,05,058	1,18,293	4·56	62	62·85
1903	27,88,452	2,98,066	1,44,766	5·39	61	51·43

Number $\frac{\text{Main head 31}}{\text{Sub-head (a)}}$. RANAGHAT-KRISHNAGAR LIGHT RAILWAY (2′ 6″ gauge)—

The line has been constructed on the old Government embankment made for the abandoned Ranaghat-Bhagwangola railway. On the 23rd February 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. A siding, 1·50 miles long, has been constructed by the Eastern Bengal State railway on the 5′ 6″ gauge, and runs from Ranaghat station to the left bank of the Churni and connects with the railway by a ferry worked by the Ranaghat-Krishnagar Light railway.

* Information not available.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 31}}{\text{Sub-head (a)}}$. RANAGHAT-KRISHNAGAR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Aistala Ghat (Right bank of the Churni river) near Ranaghat to Krishnagar .	Dec. 1895	5-4-99	20·25	20·25

Details of construction—

Permanent-way.—The permanent-way consists of 25 lb. flat-footed steel rails, on cross sleepers of pyinkado, 9 per rail of 24 feet.

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The line is practically level except a rise of 1 in 200 in the first mile.

Terms of contract—

The Ranaghat-Krishnagar Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 334, dated the 16th December 1895, under the following agreement :—

Agreement of—6th September 1895 (between the Ranaghat-Krishnagar Light Railway Company and the District Board of Nadia).

The general conditions are as follows :—

Aid by the District Board.—The District Board make up the net earnings of the Company to Rs. 1,473 per mile per annum constructed and declared open, limited to a maximum claim of Rs. 28,000 per annum.

Currency of agreement.—The District Board may determine the agreement by purchase, under section 41, Act III of 1883 (Bengal Code), the amount payable being calculated at 20 years' purchase of the average net annual profits to the Company during the four years preceding, together with a bonus of 20 per cent. on the amount so arrived at.

Terms of working.—When the net earnings of the Company, after deducting any commission payable to Agents, exceed 4 per cent. upon the capital, such surplus profits exceeding 4 per cent. and not exceeding 8 per cent. are divided equally between the Company and the District Board; and when the net earnings exceed 8 per cent. upon the capital, the Company receive one-fourth share of the surplus, the remaining three-fourths of such surplus being equally divided between the District Board and Government.

Rates and fares.—The same rates and fares as are in force on the Howrah-Amta railway.

Statistics of working—

Table I.								Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from District Board.	Total income	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	7,22,869	...	...	...	...	...	...	...	...
1899	7,27,809	46,348	8,415	1·16	12,352	20,767	2·85	59	81·34
1900	7,51,809	69,302	19,442	2·59	9,473	28,914	3·85	66	71·95
1901	7,51,157	69,117	15,185	2·02	1,465	16,650	2·22	66	78·03
1902	7,51,158	76,180	21,353	2·84	15,960	37,313	4·97	72	71·97
1903	7,48,657	86,434	33,332	4·55	5,674	39,506	5·31	82	60·86

Number $\frac{\text{Main head 32}}{\text{Sub-head (a)}}$. SHAHDARA-SAHARANPUR LIGHT RAILWAY (2′ 6″ gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Shahdara to Saharanpur	4-1-02	...	*95·00	
Baraut to Meerut		...	*30·00	
Total	...	...	...	125·00

* Commencement of work has not yet been authorised.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7, and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 33 / Sub-head (a). TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—

On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Tarakeshwar to Basua	18-12-91	7-11-94	12·50		1894	12
Basua to Magra		8-3-95	18·62		1895 to 1903	31
TOTAL OPEN MILEAGE	...	...	...	31·12		
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.						
Magra to Tribeni	...	14-4-04	2·15	2·15		
GRAND TOTAL	...	...	...	33·27		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 30 lb. to the yard, laid on patent steel sleepers for 10 miles and pyinkado sleepers for the remainder.

Ballast.—The line is laid with sand ballast and brick boxing.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 955 feet radius and is 0·18 mile in length.

Gradients.—The ruling gradient is 1 in 1000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; of a total length of 1·88 miles, from the bridge under the East Indian railway to Magraganj station, there is a gradient of 1 in 350, 0·49 mile long.

Terms of contract—

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896 under the following agreement:—

Agreement of—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company).

The general conditions are as follows:—

Currency of Agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 41 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the Owning Company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Table I. Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	9,44,627	74,074	21,002	2·22	46	71·65
1899	9,62,446	66,168	12,192	1·27	41	81·58
1900	9,61,811	76,594	20,961	2·18	47	72·63
1901	9,72,175	83,150	19,890	2·04	51	70·23
1902	9,76,194	84,272	24,842	2·54	52	76·52
1903	10,15,987	85,546	25,350	2·50	53	70·37

Number Main head 34 / Sub-head (a). TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Tezpore Ghat to Bindukuri	Oct. 1894	9-8-94	8·10		1894	8
Bindukuri to Balipara		1-9-95	12·00		1895 to 1903	20
TOTAL	...	...	...	20·10		

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 34}{\text{Sub-head } (a)}$. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge)—

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 30 lb. to the yard, laid on uriam and nahor sleepers, 2,200 to the mile.

Ballast.—The line is unballasted.

Fencing.—The line is only fenced round stations.

Curves.—In the first mile there are two curves with a radius of 500 feet, the lengths of which are 294 feet and 450 feet, respectively. In station yards the minimum radius is 300 feet.

Gradients.—The ruling gradient is 1 in 125 : between Rangapara and Balipara there is a gradient of 1 in 100 for a length of 0·66 mile.

Terms of contract—

The Tezpore-Balipara Light railway is maintained and worked under—

Terms—contained in the notification issued by the Chief Commissioner of Assam under No. 33, dated the 1st June 1895.

The general conditions are as follows :—

Government aid.—Free use of Government land and a subsidy to the extent of Rs. 5,000 from the Local Board at Tezpore.

Currency of contract.—The Secretary of State can, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract, and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice, and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.

Terms of working.—The line is worked by the owning Company.

Rates and fares.—Certain rates and fares have been fixed.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898 . . .	4,56,927	85,745	20,157	4·41	5,000	25,157	5·51	82	76·49
1899 . . .	4,74,177	95,157	26,156	5·52	5,000	31,156	6·57	91	72·51
1900 . . .	4,87,240	95,981	25,797	5·29	5,000	30,797	6·32	92	73·12
1901 . . .	4,87,240	83,840	16,898	3·47	5,000	21,898	4·49	80	79·84
1902 . . .	4,87,240	85,012	21,651	4·43	5,000	26,651	5·47	81	74·53
1903 . . .	4,87,240	94,742	27,739	5·67	5,000	32,739	6·71	81	70·72

Number $\frac{\text{Main head } 35}{\text{Sub-head } (a)}$. THATON-DUYINZAIK LIGHT RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Thaton to Duyinzaik	1883	11-2-85	7·76	7·76

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 20 lb. to the yard on steel and wooden sleepers.

Ballast.—The line is ballasted.

Fencing.—The line is unfenced.

Curves.—The total length of curves with a radius of less than 1,000 feet is 1,343 feet, the radii varying from 207 to 500 feet.

Gradient.—The ruling gradient is 1 in 80.

Terms of contract—

The Thaton-Duyinzaik Light railway is worked under the following :—

Contract of—10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of—6th June 1896 for working the railway and a Steam Launch Service between Moulmien and Duyinzaik.

The general conditions are as follows :—

Government aid.—Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmien and Thaton *vid* Duyinzaik, including both steamer and railway journeys.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 35 / Sub-head (a). THATON-DUYINZAIK LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Terms of contract—*concld.*

Currency of contract.—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway, upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract, if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

Terms of working.—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

Rates and fares.—Certain maxima have been fixed within which the proprietors are permitted to vary the rates.

Statistics of working—Information not available.

Number Main head 36 / Sub-head (a). DARJEELING-HIMALAYAN RAILWAY (2′ 0″ gauge)—

The line is laid for a great part of its length along the cart road. The road has almost continuous curves and windings as it passes across the mountains.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Siliguri to Kurseong	1879	23-8-80	31·75		1880	30
Kurseong to Sonada		1-2-81	9·50		1881 to 1883	50
Sonada to Ghum		5-4-81	5·87			
Ghum to Darjeeling		4-7-81	3·63		1884 to 1903	51
Darjeeling to Darjeeling Bazar		16-6-86	0·25			
TOTAL	...	...	...	51·00		

Details of construction—

Permanent-way.—The line was originally laid with 30 lb. iron rails, and the plains section afterwards relaid wit 40 lb. iron rails. The hill section has been relaid with 41½ lb. steel rails. The plains section is also gradually bein renewed with steel rails, 3·75 miles being so far completed. The sleepers are of sâl, oak and chestnut: for renewals s sleepers only are being used.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel, except near Siliguri where sand has bee used. On the hill section, where necessary, broken stone ballast has been put in.

Curves.—Of curves with radii varying from 60 feet (the sharpest) to 1,000 feet, there is a total length of 35·55 mil distributed over the line.

Gradients.—The ruling gradient is 1 in 23.

Terms of contract—The railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage), for constructio maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Government undertake to pay the Company such sum as will make up its gross receipts to t lakhs of rupees annually. Government land and the use of the existing cart road are also granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Compa is to surrender the road and land acquired from Government, receiving any sums due to them for permanent improvemen to the road or works connected with it. After the railway has been opened for 25 years (reckoning from the 4th M 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, terminate the contract and take over the line on payment to the Company of its value as a dividend earning investme with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract.—Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the n profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of t amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gr receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company are permitted to vary rates.

APPENDIX 38—*contd.*

[Appendices 4, (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 36.}}{\text{Sub-head (a)}}$. **DARJEELING-HIMALAYAN RAILWAY** (2′ 0″ gauge)—*concld.*

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from Local Government.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Table I.							Table II.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1880	14,33,681	*	34,197	2·39	...	34,197	2·39	*	*
1881	18,18,723	2,61,154	1,15,522	6·35	...	1,15,522	6·35	103	58·32
1882	23,56,112	3,66,474	89,045	3·72	...	89,045	3·78	141	75·70
1883	26,04,304	4,21,944	1,55,725	5·98	...	1,55,725	5·98	162	63·16
1884	27,23,240	4,35,024	1,46,725	5·39	...	1,46,765	5·39	167	66·26
1885	27,27,823	4,31,103	1,63,350	5·99	...	1,63,350	5·99	*	*
1886	27,32,136	4,96,476	2,42,109	8·86	...	2,42,109	8·86	138	51·28
1887	27,43,214	4,77,151	2,10,623	7·68	...	2,10,623	7·68	180	55·86
1888	27,71,926	6,14,898	2,83,327	10·22	...	2,83,327	10·22	233	53·92
1889	29,40,423	5,74,297	2,29,117	7·80	...	2,29,117	7·80	217	60·10
1890	29,52,108	5,76,436	2,32,894	7·89	...	2,32,894	7·89	217	59·60
1891	30,59,693	6,13,387	2,58,253	8·44	...	2,58,253	8·44	231	57·61
1892	31,09,079	6,35,778	2,66,647	8·57	...	2,66,647	8·57	240	57·46
1893	31,72,223	6,34,181	2,83,963	8·50	†—1,55,418	1,28,485	4·02	239	55·41
1894	31,77,536	6,36,284	2,56,286	8·10	—29,756	2,26,530	7·18	239	59·27
1895	31,99,765	7,39,618	3,59,933	11·25	—61,740	2,98,193	9·32	279	50·92
1896	33,12,732	7,81,594	3,59,667	10·25	—62,087	2,97,580	8·98	294	53·98
1897	33,15,455	7,44,266	3,33,188	10·05	—55,929	2,77,259	8·36	231	55·23
1898	33,65,993	7,54,580	3,41,109	10·13	—59,432	2,81,667	8·37	235	54·79
1899	35,08,469	7,14,955	2,40,770	7·12	—34,933	2,14,837	6·12	270	65·07
									55·28
1900	34,99,467	8,09,158	3,61,840	10·34	—64,268	2,97,572	8·50	305	60·17
1901	34,78,411	7,87,941	3,13,861	9·02	—49,971	2,63,890	7·58	297	54·66
1902	34,96,507	8,50,280	3,78,005	10·18	—67,704	3,10,301	8·88	321	56·65
1903	36,13,058	9,61,602	4,16,848	11·54	—79,226	3,37,622	9·34	368	

Number $\frac{\text{Main head 37.}}{\text{Sub-head (a)}}$. **HOWRAH-AMTA LIGHT RAILWAY** (2′ 0″ gauge)—

After leaving Telkul Ghât (Howrah,) the line runs through the town of Howrah and along the district road to Amta. The extension to Champadanga will be constructed on a separate alignment of its own. Diversions have been made to avoid sharp curves in the road. On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the Howrah-Amta railway.

Two miles of the Howrah-Amta railway, from Howrah to Kadamtolla, are worked over by the Howrah-Sheakhala railway.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.	1897	Miles. 15
Telkul Ghât (Howrah) to Dumjur		1-7-97	9·20		1898	29
Dumjur to Bargachia	27-3-95	2-10-97	5·87		1899	29
Bargachia to Maju		4-5-98	5·50		1900	29
Maju to Amta		1-6-98	6·62		1901	29
					1902	29
Total Main line	...	...	...	27·19	1903	29
Branch—						
Bargachia to Jagatbalabpur	27-3-95	2-10-97	1·50			
Total Branch	...	...	...	1·50		
TOTAL OPEN MILEAGE	...	...	...	28·69		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Jagatbalubpur to Antpur		...	3·50			
Antpur to Champadanga	20-3-02	...	9·00‡			
Antpur to Rajbulhat		...	8·50‡	21·00		
GRAND TOTAL	...	...	...	49·69		

* Information not available.
† Due to repayment to Government by the Railway Company on account of the up-keep and maintenance of the cart road utilized by the railway.
‡ Commencement of work not yet authorised.

Appendix 38.
History of railways.

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head } 37}{\text{Sub-head } (a)}$. **HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge)—*concld.***

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lb. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients.—The line is practically level throughout.

Terms of constracts—

The Howrah-Amta Light railway is worked on the terms contained in the Bengal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1900 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows :—

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 14 feet being left for vehicular traffic.

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, such surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay. to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898 . . .	11,24,713	1,89,519	78,910	7·02	—15,062	63,848	5·68	152	58·36
1899 . . .	11,41,307	2,50,763	1,12,794	9·85	—27,835	84,959	7·44	168	55·02
1900 . . .	11,88,283	2,56,418	1,23,104	10·36	—30,244	92,860	7·81	172	51·99
1901 . . .	11,96,697	2,60,530	1,14,032	9·53	—26,146	87,936	7·35	175	56·21
1902 . . .	12,68,532	2,65,497	1,33,120	10·49	—29,703	13,417	8·15	178	49·86
1903 . . .	12,88,853	2,77,451	1,37,833	10·69	—31,883	1,05,950	8·22	186	50·32

APPENDIX 38—*contd.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number Main head 38 / Sub-head (a). HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge)—

On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

The Howrah-Sheakhala Light railway works over 2·00 miles of the Howrah-Amta Light railway from Howrah to Kadamtolla.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Kadamtolla to Chanditala	27-3-95	2-8-97	8·88		1897	17
Chanditala to Kistrampur		10-9-97	3·75		1898	20
Kistrampur to Sheakhala		7-11-97	4·75		1899	20
Total Main line	...	...	...	17·38	1900	20
Branch—					1901	20
Chanditala to Janai	27-3-95	5-5-98	2·37		1902	20
Total Branch	...	...	...	2·37		
Grand Total	...	...	...	19·75	1903	20

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lb. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curves, sanctioned specially for Howrah town, are of 144 feet radius.

Gradients.—The line is practically level throughout.

Terms of contract—

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government, Notification No. 112, dated the 26th March 1885, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

The general conditions are as follows :—

Aid by the District Board.—The District Board has guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. Land was also provided free of charge.

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted, a bonus of 15 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company are in excess of 4 per cent. upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and fares.—Certain maxima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Percentage of net traffic receipts on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	6,09,398	76,166	16,768	2·75	4,267	21,035	3·45	70	72·12
1899	6,09,434	73,396	21,453	3·52	—250	21,203	3·48	65	70·77
1900	6,09,446	76,019	26,824	4·40	—999	25,825	4·24	74	64·71
1901	6,09,446	75,579	23,165	3·80	1,108	24,273	3·98	77	70·53
1902	6,09,565	82,019	31,739	5·20	—550	31,189	5·12	80	61·33
1903	6,14,715	87,049	34,950	5·68	—668	34,282	5·57	85	59·89

Appendix 38.
History of railways.

APPENDIX 38—*concld.*

[Appendices 4 (portion), 6, 7 and 47 in Report for 1902.]

History of railways constructed and in progress.

[For Index see page 168.]

Number $\frac{\text{Main head 39}}{\text{Sub-head (a)}}$ **JORHAT STATE RAILWAY** (2′ 0″ gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenince of the numerous tea gardens in the neighbourhood of Jorhat.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.*
Main line—			Miles.	Miles.		Miles.
Gosaigaon to Jorhat	13-9-83	15-12-84	7·00		1884	12
Jorhat to Dhali river		15-12-84	9·50		1885	29
Dhali river to Titabar		16-7-87	1·75		1886	27
Extension of line from Gosaigaon to Borghop (cold weather line)	...	22-10-01	5·00		1887 to 1889	31
Total Main line	...	...	...	23·25		
Mariani branch—					1890 to 1899	28
Chenimara Junction to Mariani	13-9-83	7-1-85	7·00			
Total Branch	...	...	...	7·00	1900 to 1903	30
Grand Total	...	...	...	30·25		

Details of construction—

Permanent-way.—Excepting 2·51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30 lb. to the yard, the whole line including the section from Gosaigaon to Borghop is laid with steel rails, 18 lb. to the yard.

Ballast.—The line is unballasted.

Fencing.—The railway land acquired for stations and buildings at Jorhat only is demarcated by barbed wire fencing.

Curves.—The sharpest curve has a radius of 480 feet and is 468 feet in length.

Gradients.—Of a total mileage of 30·25 miles, 4 miles are on a gradient of 1 in 800.

Terms of contracts—

The line is owned and worked by the State.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net traffic receipts.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1884	4,38,338	1,161	—483	...	17,533	—18,016	40	141·60
1885	5,14,641	31,828	—7,455	...	19,395	—26,850	25	123·14
1886	5,84,608	38,271	—13,887	...	22,026	—35,913	28	136·28
1887	6,79,372	49,199	—13,772	...	26,608	—40,380	32	127·99
1888	7,10,376	55,477	75	...	27,807	—27,732	38	90·86
1889	7,33,649	59,665	—3,543	...	29,057	—32,600	42	105·94
1890	7,42,351	61,967	6,162	0·85	29,448	—23,286	44	90·06
1891	7,51,421	64,583	1,483	0·20	30,026	—28,543	47	97·70
1892	7,54,791	66,079	11,789	1·56	30,107	—18,318	48	82·16
1893	7,99,680	69,810	14,436	1·81	32,013	—17,577	52	79·32
1894	8,18,184	71,933	11,201	1·37	32,587	—21,386	52	84·43
1895	8,28,409	84,696	18,720	2·26	32,919	—14,199	61	77·81
1896	8,65,300	89,996	13,745	1·59	33,592	—19,847	65	84·73
1897	9,02,416	96,186	14,124	1·57	36,102	—21,978	69	85·33
1898	9,09,445	95,958	20,135	2·21	36,179	—16,044	70	79·02
1899	9,31,626	96,488	—5,946	...	37,228	—43,174	72	106·16
1900	9,08,643	86,695	—15,664	...	36,341	—52,005	63	118·05
1901	9,01,038	83,184	—4,169	...	36,248	—40,417	56	105·01
1902	8,95,693	86,641	—3,655	...	36,237	—39,892	57	104·22
1903	9,03,343	90,710	13,594	1·51	36,408	—22,814	59	85·01

* Mileages here shown are those which actually existed in the years named. The differences as compared with the mileage of the sections as on 31st December 1903 are principally due to changes in the cold weather extensions.

APPENDICES

OF

IMPORTANT DOCUMENTS.

Appendix A.
Important documents.

APPENDIX A.

Memorandum, dated 23rd March 1904, by the Honourable Sir A. T. Arundel, K.C.S.I., on Railway development and working.

Our programme of capital expenditure on railways for the year 1904-1905 has been prepared on the same lines as before; and, as on previous occasions, has been limited not by the amount which the full development of the country could employ or by that which the existing organisation could profitably spend on that development, but by the amount which the Government can make available. This amount, I am glad to say, provides for a larger expenditure on railway development next year than has ever been possible before. That it is not, however, by any means so large as to meet all the claims upon it, is evident from the following figures contrasting the amounts which have been asked for by the various railway administrations concerned or for projects which have been accepted as necessary, with those which we have been able to allot:—

	Demand. Lakhs.	Allotment. Lakhs.
(*a*) Open lines, including rolling stock . . .	645·78	548·67
(*b*) Lines already under construction—		
(i) Begun prior to 1903-04	379·53	351·84
(ii) „ during 1903-04	168·05	148·11
(*c*) New lines to be begun in 1904-1905 . . .	248·52	91·38
	1,441·88	1,140·00
(*d*) Purchase of lines	60·00	60·00
Total . .	1,501·88	1,200·00

2. As usual the principle has been followed of providing for the needs of open lines and lines already under construction before deciding to undertake the construction of new ones, and in doing this the necessity for providing for the additional rolling stock necessary to cope with the growth of traffic has not been overlooked. Although the number of goods wagons in India has been increased from 76,471 in 1898 to 94,796 in 1902, *i.e.*, by about 24 per cent. in five years, and although 11,731 more wagons have since been supplied or are under order, we have considered it desirable to provide no less than about 300 lakhs to pay for the latter and provide for further increases of rolling stock during the coming year.

3. The following statement shows the growth of expenditure on railway development by Government during the past five years:—

Year.	Open lines, including Rolling Stock.	Lines under construction.		Total.
		Started in previous years.	Started in current year.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.
1900-01 (actual expenditure) .	528·22	251·10	18·34	797·66
1901-02 ditto .	352·58	509·06	25·64	887·28
1902-03 ditto .	481·74	452·50	71·52	1,005·76
1903-04 (latest grants) . .	398·81	511·20	72·06	982·07
1904-05 (proposed grants) .	548·67	499·95	91·38	1,140·00

4. The details of the distribution of the allotment for next year are shown in statement A, and a complete list of the railways already opened, now in hand, or

about to be started, is given in statement D. The following are the chief new items of the construction part of the programme, *viz.* :—

I. Lines started in 1903-1904 :—

Railway.	Length in miles.	Allotments.	
		1903-04.	1904-05.
Khurja-Hapur Extension, East Indian railway	38·87	3·00	10·00
Ondal-Sainthia Chord, ditto	43·62		10·00
Kaunia-Bonarpara branch, Eastern Bengal State railway	44·25	8·50	10·00
Hyderabad-Badin Extension, North Western railway	61·00	17·80	18·61
Jech-Doab, Southern Section ditto	103·00	8·68	20·00
Hapur-Meerut branch, Oudh and Rohilkhand railway	19·50	4·25	1·50
Rewari-Phulera Chord, Rajputana Malwa railway	133·32	11·65	28·00
Bairagnia-Shikarpur, Tirhoot State railway	58·05		
Bettiah-Bagaha, ditto	49·35		
Mansi-Baptiahi, ditto	78·62	18·18	50·00
Sakri-Jainagar, ditto	30·47		
Shikarpur-Bikna Thori ditto	21·50		
Total	681·55	72·06	148·11

II. Lines proposed to be commenced in 1904-1905 :—

Railway.	Length in miles.	Allotments proposed for 1904-05.
Pench Valley Coal Branch, Bengal Nagpur railway	25	5·00
Nagda-Bara-Muttra-Aligarh, Bombay, Baroda and Central India ry.	392	20·00
Henzada-Kyangin, Burma railways	66	15·00
Pegu-Moulmein, ditto	122	
Katihar-Malda branch, Eastern Bengal State railway	50	30·00
Coonoor-Ootacamund, Nilgiri railway	12	10·00
Jullundur-Kapurthala (British Section) North-Western railway	7	2·00
Khushalgarh-Kohat Conversion and Indus Bridge, ditto	33	9·38
Total	707	91·38

5. Besides these lines, arrangements have been concluded for the construction of the following railways by private enterprise not directly guaranteed or otherwise aided by the State :—

Railway.	Gauge.	Length.	Approximate cost in lakhs.
Ludhiana-Ferozepore-McLeodganj, Southern Punjab railway.	5′ 6″	163·06	87·19
Gainsari-Jarwar branch, Bengal and North-Western ry.	3′ 3⅜″	12·56	3·07
Gorakhpur-Bagaha Extension, ditto ditto	3′ 3⅜″	60·94	24·83
Kopaganj-Dhorighat, ditto ditto	3′ 3⅜″	21·70	6·43
Uska Bazar-Tulsipur Extension, ditto ditto	3′ 3⅜″	53·54	23·83
Bareilly-Soron, Rohilkund and Kumaon railway	3′ 3⅜″	55·80	55·73
Lalkua-Kashipur, ditto ditto	3′ 3⅜″	40·00	10·00
Moradabad-Ramnagar, ditto ditto	3′ 3⅜″	47·00	16·00
Barasat-Basirhat Tramway	2′ 6″	26·00	9·50
Pandharpur and Tadwala Extensions, Barsi Light ry.	2′ 6″	57·37	31·49
Tuna-Bundar Anjar Extension, Cutch State railway	2′ 6″	11·86	2·31
Moharbanj State railway	2′ 6″	28·50	6·80
Sabalgarh-Sheopur Extension, Gwalior Light railway	2′ 6″	69·00	19·10
Matheran Light Tramway	2′ 0″	12·00	10·06

Appendix A.
Important documents.

Appendix A—*continued.*

and negotiations are in progress, which we hope will result in the early construction of the following in a similar manner :—

Railway.	Length in miles.	Gauge.	Estimated cost.
			Rs.
Amritsar-Pati, North Western railway . . .	27	5′ 6″	13,39,000
Mymensingh-Bara-Ari with a branch to Gauripur, Eastern Bengal State railway	36½	3′ 3⅜″	22,15,812
Bezwada-Masulipatam, Southern Mahratta railway .	50	3′ 3⅜″	27,89,406
Guntur-Repalle, ditto .	38	3′ 3⅜″	17,33,687
Kurnool Road-Kurnool, ditto .	32	3′ 3⅜″	7,11,000
Phirangipuram-Gurzala, ditto .	50¾	3′ 3⅜″	12,59,641
Rawalpindi-Murree with extensions to Kuldana and Gharial, North Western railway	50	2′ 6″	41,34,077
Singhjani-Nalitabari, Eastern Bengal State railway .	25	2′ 6″	12,38,886

6. Towards the close of the current year we have been approached by the owners of the following lines, *viz.* :—

	Gauge.	Length in miles.
Segauli-Raksaul railway, Bengal and North-Western railway	3′ 3⅜″	18·09
Brahmaputra-Sultanpur railway, Eastern Bengal State railway	3′ 3⅜″	59·37
Cooch Behar State railway, Eastern Bengal State railway	2′ 6″	33·60
Ranaghat-Krishnagar Light railway, ditto .	2′ 6″	20·25

with a view to the purchase of the lines by the State ; and, after consideration of the value of each as a commercial undertaking, Government propose to purchase them at an aggregate cost of about 60 lakhs. It is expected that the transactions will shortly be completed. The purchase of the last named line is, of course, a result of the construction of the new Ranaghat-Murshidabad line in its neighbourhood; but as regards the rest, it seems somewhat disappointing that after all the endeavours made with the intention of encouraging landowners and capitalists to embark in railway enterprise in India, the owners of the first two lines should consider it better to sell than to wait for the development of traffic which must in time make those lines remunerative investments.

7. This incident, and the fact that but few offers have been received for concessions on branch line or rebate terms, clearly show that, in the present state of the market, money cannot be attracted for railway enterprise in India except by a firm guarantee of a minimum interest at least as high as is paid on direct Government loans, or unless the promoters can be assured of a much higher rate of profit than Indian railways as a rule are likely to earn during the first few years after opening. This matter has been dealt with by Mr. T. Robertson in his report on the working of Indian railways, and his remarks are receiving the careful consideration of this Government and of the Secretary of State, but it will probably be some time before a conclusion can be arrived at.

8. It is satisfactory to observe that there are indications that the offer made by the Government of India to encourage Local Boards to finance light railways in their own districts by advancing them money on the security of their entire resources is

likely to be availed of by the District Board, Kistna, for the construction of one or more of the following lines :—

(*a*) Bezwada-Masulipatam,

(*b*) Guntur-Repalle,

(*c*) Phirangipuram Gurzala,

in the event of the promoters who have endeavoured to form a company to construct these lines failing to raise the necessary funds within the time fixed, *vide* Statement C.

9. At the beginning of the official year 1903-1904, there were 26,308 miles of railway open for traffic and 2,650 miles under construction. Since then and up to the date of going to press 738 miles have been added to the former figure, and before the end of this month an addition of 100 miles is expected. This will raise the total length of railways open for traffic at the close of year 1903-1904 to 27,144 miles (*vide* Statement D).

During the current year sanction was accorded to the construction of 1,282 miles of railways, details of which are to be found in Statement D, and there are now 3,044 miles under construction or sanctioned for construction.

10. The railways of India, taken as a whole, for the fourth year in succession show a balance to the credit of the general revenues after paying working expenses, interest charges and payments for annuities in redemption of Capital. The approximate figures for 1903-1904, as compared with the three previous years, are as follows :—

	1900-1901. Lakhs.	1901-1902. Lakhs.	1902-1903. Lakhs.	1903-1904. Lakhs.
Surplus of revenue over expenditure .	48·77	126·99	34·34	128·19

11. Compared with the figures of the previous year the results for the year 1903-1904 show an improvement of 93·85 lakhs. The receipts are more by 195·83 lakhs, the working expenses are higher by 64·29 lakhs, while interest charges, etc., have increased by 37·69 lakhs. In 1902-1903 although there was an improvement in the earnings of certain railways due to the Delhi Durbar, the installation of His Highness the Maharaja of Mysore and certain religious fairs, a considerable falling off occurred in the earnings of the East Indian, North Western and Rajputana-Malwa railways owing to an abnormal depression in the coal trade and in grain and pulse traffic. In the Budget Estimate for 1903-1904 due allowance was made for general improvement in traffic, particularly on the lines that were so backward in the previous year, and the above result shows that although adverse conditions remain much the same on the Rajputana-Malwa railway, the improvement has been marked on some of the larger lines, the traffic on which has been exceptionally favourable. The increase in working expenses occurs chiefly on the Great Indian Peninsula railway system and on the Burma, Eastern Bengal State and North Western railways, where largely increased outlay has been necessary on maintenance and renewals of way and rolling stock and on repairs to flood damages. The charges for interest, etc., rise with the steadily increasing expenditure on Capital account, but this increase is more than covered by the increase in profits above quoted. The large surpluses of the last four years are full of encouragement for the construction of carefully selected extensions and projects in the future.

STATEMENT A.

STATEMENT

Anticipated Capital Expenditure on Railways, Open or under Construction, for the year 1904-1905.

Branch lines under Rebate terms are excluded.

Appendix A.
Important documents.

Appendix A—*continued.*

Capital Expenditure on Railways—1904-1905.

(OMITTING 000.)

No.	Railway.	Grants allotted for 1903-1904.	Distribution of grants during 1904-1905.
	I.—OPEN LINES.	Rs.	Rs.
	I.—By State Agency.		
1	Eastern Bengal	49·15	50·00
2	Do. Improved facilities near Calcutta	12·04	10·86
3	Do. Rangpur-Dhubri	1·41	1·50
4	Oudh and Rohilkhand	29·60	27·48
5	North Western	34·52	65·62
6	Warora Colliery	—0·46	—0·25
7	Frontier Railway Reserve	0·10	...
8	Jodhpur-Hyderabad (British Section)	0·03	0·08
	Total Open Lines by State Agency	126·39	155·29
	II.—By the Agency of Main Line Companies.		
9	East Indian	71·09	71·17
10	Do. Colliery Sidings	2·91	1·33
11	Rajputana-Malwa	16·70	18·00
12	Tirhoot and Hajipur-Katihar	10·50	15·00
13	South Indian	5·00	12·00
	Do. Madura-Pamban	6·53	1·56
14	Great Indian Peninsula	32·66	100·00
15	Do. Bhopal-Itarsi (Brit. Sec.)	1·47	2·00
16	S. M. Ry., Guntakal-Mysore Frontier	0·05	0·24
17	N. G. S. Ry., Bezwada Extension	0·15	0·03
18	Madras Railway—North-East (East Coast) Line	26·50	20·00
19	Do. Nilgiri	0·03	3·60
20	Assam-Bengal Construction Do. Land Do. Jetties	36·48	20·00
	Total Open Lines by Agency of Main Line Companies	210·34	264·93
	Carried over	336·73	420·22

Appendix A—*continued.*

Capital Expenditure on Railways—1904-1905—contd.

(OMITTING 000.)

No.	Railway.	Grants allotted for 1903-1904.	Distribution of grants during 1904-1905.
		Rs.	Rs.
	OPEN LINES—*contd.*		
	Brought forward .	336·73	420·22
	III.—Against the Capital Accounts of the old Guaranteed Railway Companies.		
21	Madras	1·56	33·00
22	„ Calicut - Cannanore	2·00	0·30
23	Bombay, Baroda and Central India	—0·39	5·21
24	Ditto ditto Godhra Baroda chord	23·60	3·24
	Total Open Lines, old Guaranteed Companies .	26·77	41·75
	IV.—Against the Capital Accounts of Indian Railway Companies other than the old Guaranteed Railway Companies.		
25	Bengal Central	0·50	0·66
26	Bengal Nagpur (including Northern Section of East Coast Railway)	12·71	12·00
27	Burma	29·53	32·52
28	(Great Indian Peninsula), Indian Midland	34·84	27·27
29	R. & K. Ry., Lucknow-Bareilly	3·84	0·54
30	Southern Mahratta	0·80	12·00
31	Do. Mysore Section	1·20	1·21
	Total Open Lines other Railway Companies .	83·42	86·20
	V.—Capital Accounts of Branch Line Companies with a firm Guarantee.		
32	Hardwar-Dehra	0·54	0·50
33	Brahmaputra-Sultanpur	0·50	...
	Total Open Lines by Branch Line Companies .	1·04	0·50
34	Purchase of four Railways*	...	60·00
	Total Open Lines—carried over .	447·96	608·67

* Cooch Behar.
Brahmaputra-Sultanpur.
Ranaghat-Krishnagar.
Segowlie-Raksaul.

Appendix A.
Important documents.

Appendix A—*continued.*

Capital Expenditure on Railways—1904-1905—contd.

(OMITTING 000)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1902-03.	Grants allotted during 1903-04.	Distribution of grants during 1904-05.
		Miles.	Rs.	Rs.	Rs.	Rs.
	TOTAL OPEN LINES—brought forward	...	...	...	447·96	608·67
	II.—LINES UNDER CONSTRUCTION.					
	I.—BY AGENCY OF MAIN LINE COMPANIES.					
35	East Indian-Gya Asansol Grand Chord	99	1,41,14	25·7	50·50	50·00
36	Ditto Shikohabad-Farukhabad	66	45,20	7·4	10·00	15·00
37	Ditto Ondal Sainthia	44	43,55	...	3·00	10·00
38	Ditto Khurja Hapur	39	26,08			10·00
39	B. B. & C. I. Ry. Rewari Phulera Chord	133	53,25	...	11·65	28·00
40	Tirhoot State Railway—Mansi-Baptiahi and other extensions	238	1,25,72	...	18·13	50·00
41	S. I. Ry. Tinnevelly-Quilon, British Section	50	45,06	33·2	6·36	3·06
42	Ditto Native State Section	58	1,12,65	82·0	25·01	3·30
	Ditto Marina Loop	...	...	...	—0·05	...
43	Madras Ry. Azikhal-Mangalore	77	1,08,63	3·9	32·18	50·00
	TOTAL	...	...	152·2	156·83	219·36
	II.—AGAINST THE CAPITAL ACCOUNT OF THE OLD GUARANTEED RAILWAY COMPANIES.					
	TOTAL	...	...	...	...	...
	III.—AGAINST THE CAPITAL ACCOUNT OF INDIAN RAILWAY COMPANIES OTHER THAN THE OLD GUARANTEED RAILWAY COMPANIES.					
44	Bengal-Nagpur Sini-Midnapur-Cuttack-Calcutta	353	8,02,45	809·5	50·82	51·48
45	Ditto Jubbulpore-Gondia (Satpura)	253	85,11	63·5	34·42	17·19
46	Ditto Midnapore-Jherria Extension	114	1,07,81	125·8	65·43	24·41
47	Ditto Colliery lines	25	18,54	17·6	9·60	1·07
48	Ditto Chowrassi Branch	9	5,67	3·1	2·53	...
49	Ditto Hariharpur Boojoodih	28	31,57	0·2	6·67	15·85
50	Ditto Reserve for new lines (Pench Valley)	25	9,00	...	1·26	5·00
51	Burma Railways, Henzada Kyangin	188	168,00	...	...	15·00
51	Ditto Pegu-Moulmein					
		...	...	10,19·7	170·73	130·00
	Total lines under Construction—carried over	...	...	...	327·56	349·36
	TOTAL OPEN LINES—carried over	...	...	...	447·96	608·67

Appendix A—*continued.*

Capital Expenditure on Railways—1904-1905—contd.

(OMITTING 000.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1902-03.	Grants allotted during 1903-04.	Distribution of grants during 1904-05.
		Miles.	Rs.	Rs.	Rs.	Rs.
	Total Open Lines—brought forward . .	...	...	...	447·96	608·67
	Total Lines under Construction—brought forward . .	...	...	...	327·56	349·36
	LINES UNDER CONSTRUCTION—*contd.*					
	III.—By the State.					
53	E. B. S. Ry.—Dhubri-Gauhati	151	92,31	0·7	14·35	10·23
54	Do. Kaunia-Bonarpara	45	21,79	...	8·50	10·00
55	Do. Murshidabad Branch	96	84,48	7·0	40·00	35·29
56	O. and R. Ry.—Allahabad-Fyzabad	97	1,17,09	95·6	41·89	10·75
57	Do. Hapur-Meerut	20	5,75	...	4·25	1·50
58	N. W. Ry.—Hyderabad-Badin	61	32,46	...	17·80	18·61
59	Do. Quetta-Nushki	82	70,06	8·0	25·39	25·00
60	Do. Jech-Doab (Southern Section)	52	25,70	...	8·68	20·00
61	Madras Ry.—Coonoor-Ootacamund	12	22,00	...	...	10·00
62	Agra-Delhi Chord	121	90,76	19·3	45·19	35·20
63	Reserve for New Lines	...	...	...	...	65·39
	Total Lines under Construction by the State .	...	...	94·6	206·55	241·97
	Total Lines under Construction .	...	...	...	534·11	591·33
	Total—Open Lines .	...	...	...	447·96	608·67
	Grand Total .	...	...	...	982·07	12,00·00

Appendix A—*continued.*

Statement of Capital Expenditure on Railways—1904-1905—concld.

(OMITTING 000)

No.	Railway.				Distribution of grants during 1904-05.
	ABSTRACT BY OPEN LINES AND CONSTRUCTION.				
	I.—Capital for Open Lines.				Rs.
	i. By State agency				155·29
	ii. By agency of Main Line Companies				264·93
	iii. By „ old Guaranteed Companies				41·75
	iv. By „ other Railway Companies				86·20
	v. By „ Branch Companies				0·50
			Total Open Lines		548·67
	Purchase of four railways				60·00
	II.—Capital for Lines under Construction by Companies.				
	i. By agency of Main Line Companies				219·36
	ii. By „ old Guaranteed Railway Companies				...
	iii. By „ other Railway Companies				130·00
	iv. By „ Branch Line Companies				...
			Total Lines under Construction by Companies		349·36
	III.—Capital for Lines under Construction by the State				241·97
				GRAND TOTAL	12,00·00
	ABSTRACT SHOWING DISTRIBUTION BY FUNDS.				
I.—From Imperial Funds.	(i) By State agency	(a) Open Lines			155·29
		(b) Construction			241·97
				Total	397·26
	(ii) By the agency of Main Line Companies.	(a) Open Lines			264·93
		(b) Construction			219·36
				Total	484·29
				Total I	881·55
II.—Against the Capital Account of the old Guaranteed Railway Companies.		(a) Open Lines			41·75
		(b) Construction			...
				Total II	41·75
III.—Against the Capital Accounts of Indian Railway Companies other than the old Guaranteed Railway Companies.		(a) Open Lines			86·20
		(b) Construction			130·00
				Total III	216·20
IV.—Against the Capital Accounts of Branch Line Companies which are in receipt of a firm Government Guarantee.		(a) Open Lines			0·50
		(b) Construction			...
				Total IV	0·50
	Total I to IV	(a) Open Lines			548·67
		(b) Construction			591·33
V.—Purchase of four railways					60·00
				GRAND TOTAL	12,00·00

Appendix A—*continued.*

STATEMENT B.

List of new lines to be taken up as funds permit, with the estimated yearly provision required to ensure an economical rate of progress when once started.

(Lakhs of rupees.)

No.	Railway.	Length in Miles.	Estimated cost.	Approximate amount each year.				
				1st.	2nd.	3rd.	4th.	Future.
			Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.
	East Indian Railway—							
1	Burdwan-Howrah Chord	42	56·33	10	20	26	...	...
2	Bhagalpur-Bausi-Baidyanath	76	56·60	10	20	26	...	...
3	Hoogly-Kutwa	65	63·12	4	30	30	...	...
4	Kutwa-Ahmedpur	32	32·00	2	10	20	...	...
5	Gya-Kutwa cross line	180	148·47	10	40	50	49	...
6	Fatepur-Markundi	72	98·46	10	40	49	...	...
7	Agra City Terminus	...	15·00	5	10	...	...	...
8	Rewa-Sutna	31	5·25	6	...	...	...	...
	Bengal-Nagpur Railway—							
9	Bankura (Bishenpur)-Calcutta	105	246·00	20	50	50	50	76
10	Pench Valley Coal Branch	25	9·00	5	4	...	...	...
11	Vizianagram-Raipur	310	281·00	50	50	50	50	81
12	Ganjam District Light Railways	246	65·33	10	20	20	25	...
13	Gondia-Chanda (including Brahmapuri-Nagpur Branch).	222	100·82	40	40	21	...	...
14	Ranchi Plateau	127	45·04	10	20	15	...	...
15	Panchkura Luff Point	25	28·00	14	14	...	...	...
16	Chindwara-Nagpur	88	9·00	5	4	...	...	...
	Eastern Bengal State Railway System—							
17	Katihar-Malda	50	42·00	30	12	...	...	...
18	Sara Bridge	...	130·00	30	40	40	20	42
19	Mymensingh-Netrokana-Bara Ari	36	20·93	10	11	...	...	...
20	Singhani-Sherpur-Nalitabari	25	12·89	10	3	...	...	...
21	Dacca-Aricha	45	58·14	10	20	20	8	...
22	Serajgang-Natore	60	...	10	10	...	...	...
	Bengal and North-Western, Rohilkund and Kumaon Railway Systems—							
23	Jaunpur-Azimgarh	35	14·00	4	10	...	...	...
24	Lalkua-Kashipur	40	10·00	3	7	...	...	...
25	Gogragbat-Sitapur	58	25·00	5	20	...	...	...
26	Moradabad-Ramnagar	47	16·50	6	11	...	...	...
	Oudh and Rohilkhand Railway System—							
27	Allahabad-Jaunpur	58	30·22	3	27	...	...	...
28	Pilibhit-Barmdeo	40	20·00	10	10	...	...	...
	North-Western Railway System—							
29	Shahdera-Lyallpur	72	36·00	6	20	10	...	...
30	Larkhana-Kambar	33	20·00	10	10	...	...	...
31	Kohat-Bannu	83	40·00	20	20	...	...	...

Appendix A.
Important documents.

Appendix A—*continued.*

STATEMENT B—*concluded.*

List of new lines to be taken up as funds permit, with the estimated yearly provision required to ensure an economical rate of progress when once started.

(Lakhs of rupees.)

No.	Railway.	Length in Miles.	Estimated cost.	Approximate amount each year.				
				1st.	2nd.	3rd.	4th.	Future.
			Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.
	North Western Railway System—*concld.*							
32	Khyber Railway	35	35·00	10	10	15	...	...
33	Kabul River Railway	55	127·09	10	20	30	40	27
34	Kashmir Railway	70	70·00	10	20	30	10	...
35	Jullundar-Kapurthala (British Section)	7	3·99	3	...	...	...	...
	Bombay, Baroda and Central India Railway System—							
36	Bombay-Sind Connection (Viramgam-Badin)	290	280·00	10	30	30	30	180
37	Deesa-Tharad	85	22·72	10	13	...	...	...
38	Nagda-Barar Muttra-Aligarh	392	381·16	20	40	40	50	232
	Jodhpur-Bikaner Railway System—							
39	Bara-Ajmer-Marwar	213	137·00	16	48	48	25	...
	Great Indian Peninsula Railway System—							
40	Warora-Chanda	42	46·00	10	20	16	...	...
41	Itarsi-Nagpur	259	...	10	10	10	10	...
42	Multai-Wardha	91	...	5	10	10	10	...
43	Warora-Belarpur	160	81·94	5	20	7	...	...
44	Belarpur-Warangal	38	...	5	10	10	10	...
45	Harpalpur-Kalpi	102	15·91	10	6	...	...	...
46	Harpalpur-Nowgong	19	2·98	3	...	...	...	...
47	Khandwa-Akola-Basim-Purna	252	170·00	20	40	40	40	30
48	Khamgaon-Jalna	94	32·65	10	10	13	...	...
	Madras Railway—							
49	Podanur-Dindigal	115	85·00	10	30	30	15	...
50	Salem-Attur	36	17·60	7	11	...	...	...
	Southern Mahratta Railway System—							
51	Bezwada-Masulipatam	50	27·90	7	10	10	...	...
52	Kurnool Road, Kurnool	32	7·11	8	...	...	...	...
53	Guntur-Repalle	38	17·34	7	10	...	...	...
54	Phirangipuram-Gurzala (famine feeder)	51	12·00	3	9	...	...	...
	South Indian Railway System—							
55	Nanjangud-Erode	121	123·03	23	50	50	...	...
56	Trichinopoli-Tirukoilur	97	74·43	10	30	35	...	...
57	Rameswaram Extension	12	119·97	10	50	60	...	...
58	Kalikiri-Rayachoti (famine feeder)	34	10·76	3	8	...	...	...
	Burma Railways System—							
59	Pegu-Syriam	100	64·00	10	20	34	...	...
60	Sagaing bridge	...	44·44	10	20	15	...	...

Appendix A—*continued.*

STATEMENT C.

Statement showing the lines of railway proposed, or which were or are the subject of negotiations, for construction by private Companies.

No.	Name of railway.	Length.	Estimated cost.	Remarks.
		Miles.	Rs.	
	Bengal—			
1	Burdwan-Cutwa	34	26,49,000	Negotiations pending.
2	Hooghly-Cutwa-Ahmedpur (or Sainthia)	97	95,12,000	
3	Mymensingh, *vid* Netrakona, to Bara-Ari, with branch from Shambhuganj to Gauripur	36½	22,16,000	Negotiations in progress.
4	Phulbari-Sumjhia	13	4,42,000	Negotiations pending.
5	Shibnibash (Kissengunge)—Kotchandpur-Magura	64	49,94,000	
6	Singhjani, *vid* Sherpur, to Nalitabari	25	12,39,000	Negotiations in progress.
	Hyderabad—			
7	Raichur-Wondalli	43	12,53,000	Concession granted in June 1900, but scheme no further advanced.
	Madras—			
8	Bellary-Rayadrug	33	8,33,000	Under construction out of the Famine Insurance Grant.
9	Hospet-Kottur	38	10,37,000	
10	Berhampore-Russelkonda	49	14,91,000	Negotiations have not advanced.
11	Bezwada-Masulipatam	50	27,89,000	Negotiations still proceeding, the promoters having asked for the exclusion of the Kurnool Road (Dhone)—Kurnool railway from the scheme and for an extension of time for six months from the date of approval of the revised estimates for the remainder.
12	Guntur-Repalle	38	17,34,000	
13	Kurnool Road (Dhone)—Kurnool	32	7,11,000	
14	Phirangipuram-Gurzala	51	12,60,000	
15	Vizianagram-Raipur with Sointilla branch	359	2,81,05,000	Negotiations terminated owing to the promoters' inability to form a company on the terms offered.
	North-West Frontier—			
16	Sarai Kala-Abbottabad-Kashmir frontier	80	91,00,000	Consideration postponed pending a decision on the Kashmir railway scheme.
	Punjab—			
17	Amritsar-Tarn Taran-Patti	27	13,39,000	Negotiations in progress.
18	Jullundur-Hoshiarpur	24	14,10,000	Negotiations pending.
19	Kangra Valley	90	59,35,000	Negotiations closed owing to the promoters' inability to form a company on the terms offered.
20	Rawalpindi-Murree with extensions to Kuldana and Gharial	50	41,34,000	Negotiations in progress.
	Rajputana—			
21	Baran-Ajmere-Marwar	213	1,36,67,000	Proposals rejected owing to the promoters' requiring a firm guarantee in sterling.

Appendix A.
Important documents.

Appendix A—*continued.*

STATEMENT D.

Memorandum on the construction of Railways.

		Miles.	Miles.
(i)	East Indian	1,931·15	6,751·51
	Bengal Central (*a*)	125·01	
	Bengal-Nagpur	3,065·17	
	Indian Midland	(*b*) 796·53	
	Great Indian Peninsula	1,561·63	
	Khamgáon	§	
	Amraoti	§	
	Bohpal-Itarsi (*British section*)	(*b*) 13·11	
	Godhra-Ratlam-Nagda	(*c*) 141·34	
	Bezwada extension	(*d*) 20·58	
	Madras (North-East line)	(*e*) & (*f*) 497·19	
(ii)	North Western	(*g*) & (*h*) 3,077·50	4,418·16
	Oudh and Rohilkhand	1,033·64	
	Eastern Bengal	277·02	
(iii)	Bombay, Baroda and Central India	*460·68	1,348·78
	Madras	888·10	
(iv)	Delhi-Umballa-Kalka	(*i*) 163·24	875·47
	Tarkessur	(*i*) 22·23	
	South Behar	(*i*) 78·76	
	Southern Punjab	(*j*) 424·72	
	Hardwar-Dehra	(*k*) 35·04	
	Tapti Valley	(*c*) 155·48	
(v)	Bina-Goona-Baran	(*b*) 145·63	709·93
	Bhopal-Ujjain	(*b*) 113·27	
	Bhopal-Itarsi (*Native State section*)	(*b*) 44·28	
	The Nizam's Guaranteed State	330·13	
	Nagda-Ujjain	(*c*) 54·32	
	Petlad-Cambay (Anand-Tarapur section)	(*c*) 21·50	
	Petlad-Cambay (Tarapur-Cambay section)	(*c*) 10·92	
	Kolar Gold-fields	(*c*) 9·88	
(vi)	Bajpura-Bhatinda	(*j*) 107·05	201·63
	Jammu and Kashmir (*Native State section*)	(*j*) 15·93	
	Ludhiana-Dhuri-Jakhal	(*j*) 78·65	

(ii)	Bengal and North-Western—		7,994·50
	Tirhoot section	516·89	
	Company's section (*l*)	813·72	
	Rohilkund and Kumaon (*Lucknow-Bareilly section*)	(*m*) 231·17	
	Rajputana-Malwa	(*c*), (*h*) & (*m*) 1,948·36	
	Palanpur-Deesa	(*c*) 17·28	
	Southern Mahratta	1,012·06	
	Guntakal-Mysore frontier	(*n*) 119·50	
	Mysore section (Southern Mahratta)	(*n*) 296·22	
	Nilgiri	(*o*) 16·90	
	South Indian	1,123·13	
	Tanjore District Board	(*o*) 71·11	
(viii)	Assam-Bengal	643·71	700·76
	Burma	1,311·44	
	Jodhpur-Hyderabad (*British section*)	(*p*) 123·98	
	Tinnevelly-Quilon (Travancore) (*British section*)	(*o*) 19·05	
	Eastern Bengal—		
	Northern, Behar and Kaunia-Dhubri sections (*including the Kaunia-Kurigram branch, and British section, Cooch Behar-Santrabari extension, 3′ 6″ gauge*)	535·24	
	Dacca section	85·92	
	Cawnpore-Barhwal (*metre gauge link*)	(*q*) 79·60	
(ix)	Deoghur	4·29	500·67
	Brahmaputra-Sultanpur	(*r*) 59·37	
	Mymensingh-Jamalpur-Jagannathganj	(*r*) 53·14	
	Rohilkund and Kumaon (*Company's section*)	53·93	
	Bengal Dooars	36·40	
	Bengal Dooars extensions	105·76	
	Dibru-Sadiya	77·50	
(x)	Ledo and Tikak-Margherita Colliery	(*s*) 11·00	712·58
	Ahmedabad-Parantij	(*c*) 54·70	
	Sagauli-Raxaul	(*t*) 18·09	
	Ahmedabad-Dholka	(*c*) 25·00	
	Vijapur-Kalol-Kadi	(*c*) 29·44	
	Gaekwar's Mehsana	(*c*) 92·63	
	Hyderabad-Godavari Valley	(*d*) 391·42	
	Kolhapur	(*u*) 29·27	
	Hindupur (Yesvantpur-Mysore frontier)	(*n*) 51·35	
	Mysore-Nanjangud	(*n*) 15·80	
	Birur-Shimoga	(*n*) 37·92	
	Shoranur-Cochin	(*c*) 64·75	
(xi)	Jodhpur-Bikaner	700·29	1,223·04
	Udaipur-Chittor	67·30	
	Bhavnagar-Gondal-Junagad-Porbandar	(*v*) 334·19	
	Jetalsar-Rajkot	(*v*) 46·21	
	Jamnagar	(*v*) & (*w*) 54·22	
	Dhrangadra	(*w*) 20·83	
(xii)	West of India Portuguese	(*x*) 51·11	73·61
	Pondicherry	(*o*) 7·85	
	Karaikkal-Peralam	(*o*) 14·65	

(xiii)	Bengal-Nagpur—Raipur-Dhamtari branch (2′ 6″)	(*y*) 56·24	56·24
(xiv)	Jornat (2′ 0″)	30·00	106·13
	Nowshera-Dargai (2′ 6″)	(*j*) 40·25	
	Kushalgarh-Kohat-Thal (2′ 6″)	(*j*) 29·70	
	Daudot Light (2′ 0″)	(*j*) 6·18	
(xv)	Darjeeling-Himalayan (2′ 0″)	51·00	239·76
	Barsi Light (2′ 6″)	21·59	
	Howrah-Amta (2′ 0″)	28·69	
	Howrah-Sheakala (2′ 0″)	19·75	
	Ranaghat-Krishnagar (2′ 6″)	20·25	
	Tarakeshwar-Magra (2′ 6″)	31·12	
	Tezpore-Balipara (2′ 6″)	20·10	
	Powayan Light (2′ 6″)	(*x*) 39·50	
	Thaton-Duyinzaik Light (2′ 6″)	7·76	
(xvi)	Gaekwar's Dabhoi (2′ 6″)	(*c*) 78·80	266·99
	Rajpipla (2′ 6″)	(*c*) 37·37	
	Parlakimedi Light (2′ 6″)	(*y*) 24·68	
	Gwalior Light (3′ 0″)	(*b*) 126·14	
(xvii)	Cooch Behar (2′ 6″)	(*r*) 33·60	33·60
(xviii)	Morvi (2′ 6″)		94·36

At the commencement of 1903-04, *i.e.*, on the 1st April 1903, the total length of railways open for traffic was 26,307·72 miles, made up as follows :—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	6,751·51	
(ii) State lines worked by the State	4,418·16	
(iii) Guaranteed companies	1,348·78	
(iv) Assisted companies	875·47	
(v) Lines owned by native states and worked by companies	709·93	
(vi) Lines owned by native states and worked by state railway agency	201·63	
		14,305·48
3′ 3¾″ gauge—		
(vii) State lines worked by companies	7,994·50	
(viii) State lines worked by the State	700·76	
(ix) Assisted companies	500·67	
(x) Lines owned by native states and worked by companies	712·58	
(xi) Lines owned and worked by native states	1,223·04	
(xii) Foreign lines	73·61	
		11,205·16‡
Special 2′ 6″ and 2′ 0″ gauges—		
(xiii) State lines worked by companies	56·24	
(xiv) State lines worked by the State	106·13	
(xv) Assisted companies	239·76	
(xvi) Lines owned by native states and worked by companies	266·99	
(xvii) Lines owned by native states and worked by state railway agency	33·60	
(xviii) Lines owned and worked by native states	94·36	
		797·08
TOTAL		26,307·72

(*a*) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(*b*) Worked by the Great Indian Peninsula Railway Company.
(*c*) Worked by the Bombay, Baroda and Central India Railway Company.
(*d*) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(*e*) Worked by the Madras Railway Company.
(*f*) Including 2·66 miles laid on a mixed (5′ 6″ and 3′ 3¾″) gauge, and 0·31 mile on the 3′ 3¾″ gauge.
(*g*) Including 5·63 miles of military line not used for public traffic.
(*h*) Including 26·28 miles of mixed (5′ 6″ and 3′ 3¾″) gauge between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputana-Malwa railways.
(*i*) Worked by the East Indian Railway Company.
(*j*) Worked by the North Western State railway.
(*k*) Worked by the Oudh and Rohilkhand State railway.
* Includes the Viramgam-Wadhwan section, 39·23 miles, converted from the 5′ 6″ gauge to the 3′ 3¾″ gauge on 14th December 1902.
† The line was purchased by Government with effect from the 1st January 1903.
‡ Excludes 39·23 miles of the Viramgam-Wadhwan section converted from the 5′ 6″ gauge to the 3′ 3¾″ gauge on the 14th December 1902.
(*l*) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
(*m*) Including 2·10 miles at Ujjain and 3·07 miles between Jumna East Bank and Agra Cantonment, laid on the 5′ 6″ gauge.
(*n*) Worked by the Southern Mahratta Railway Company.
(*o*) Worked by the South Indian Railway Company.
(*p*) Worked by the Jodhpur-Bikaner Railway.
(*q*) Excluding 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh, but including the length, Bara Banki to Burhwal, 16·79 miles and the length over the Cawnpore Bridge, 0·59 mile, laid on a mixed gauge.
(*r*) Worked by the Eastern Bengal State railway.
(*s*) Worked by the Assam Railways and Trading Company.
(*t*) Worked by the Bengal and North-Western Railway Company.
(*u*) Including 4·87 miles of Bhavnagar Dock estates and Junagad quarry lines.
(*v*) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
(*w*) Including 3·99 miles of Bedi-Bandar Dock estate siding.
(*x*) Worked by the Rohilkund and Kumaon Railway Company.
(*y*) Worked by the Bengal-Nagpur Railway Company.
§ Classed as a State railway in consequence of the lease in perpetuity of the Assigned Districts of Berar to the British Government with effect from the 1st October 1902, and treated as an integral part of the Great Indian Peninsula railway undertaking as from the 1st January 1903.

Appendix A—*continued.*

And the mileage under construction or sanctioned for construction on the same date was 2,649·70 miles, as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	441·92	
(ii) State lines worked by the State	303·95	
(iii) Guaranteed companies	61·07	
		806·94
3′ 3⅜″ gauge—		
(iv) State lines worked by companies	613·33	
(v) State lines worked by the State	151·62	
(vi) Assisted companies	53·29	
(vii) Lines owned by native states and worked by companies	70·15	
(viii) Lines owned and worked by native states	72·85	
		961·24
Special (2′ 6″ and 2′ 0″) gauges—		
(ix) State lines worked by companies	297·50	
(x) State lines worked by the State	62·03	
(xi) Assisted companies	394·62	
(xii) Lines owned by native states and worked by companies	127·37	
		881·52
TOTAL		2,649·70

There was thus a grand total of railways completed and in hand, on the 1st April 1903, of miles . . 28,957·42

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Shikohabad to Farukhabad	65·82		
	Manpur to 0·87 mile beyond Gurpa	25·25		
	Mile 0·37 beyond Gurpa to Kodarma	18·19		
	Kodarma to Hariharpur	56·35		
	Mile 170¾ on Jharia branch to Chandore	4·16	175·98	
	Jharia to Dhanbaid	3·75		
	Tasra siding	1·75		
	Northern half of the Malkera-Katrasgarh cross connection	0·71		
	Bengal-Nagpur—			
	Chaurashi to Nodeeha in the Chaurashi coal-fields.	4·81		
	Bhojudih to Hariharpur	37·90		
	Bhojudih to Parthadihi	1·45		
	Bhojudih to Mohuda, including the Bhaga connection	21·36	57·73	441·92
	Bhowra siding	1·50		
	Southern half of the Malkera-Katrasgarh cross connection.	0·71		
	Indian Midland—			
	Ait to Kunch		8·85	
	Agra-Delhi Chord		121·16	
	Madras (North-East line)—			
	Korukkupettai to Basin Road		0·93	
	Azhikal-Mangalore extension		77·27	
(ii)	North Western—			
	Jech Doab line, Northern section—			
	Malakwal to Karana	51·40	133·90	
	From a point 12 miles south of Quetta to Nushki	82·50		
	Oudh and Rohilkhand—			
	Sultanpur to Chilbilla	23·00		
	Allahabad to Siwait	11·30	85·14	303·95
	Sultanpur to Fyzabad	36·37		
	Balamau to Madhoganj	14·47		
	Eastern Bengal—			
	Extension of Chitpore terminus	1·66		
	Panchooria to the Ganges (*b*)	6·00	84·91	
	Kankurgachi Chord	2·25		
	Ranaghat to Murshidabad	75·00		
(iii)	Bombay, Baroda and Central India—			
	Godhra to Baroda		44·00	61·07
	Madras—			
	Tellichery to Azhikal		17·07	
	Bengal and North Western—			
	Tirhoot section—			
	Sakri to Jainagar (*a*)	30·47		
	Company's section—			
	Aunrihar to Jaunpur	36·14		
	Uska Bazar to Tulsipur	53·54	192·65	
	Gaisanri to Jarwa	12·56		
	Gorakhpur to Bagaha	60·94		
	Rohilkund and Kumaon (*Lucknow-Bareilly section*)—			
	Dudhwa to the Mohan river		5·93	
	Rajputana-Malwa—			
	Rewari-Phulera Chord (*a*)		133·32	
	Famine lines (Madras Presidency)—			
(iv)	Bellary to Rayadrug	3·00	71·10	613·3
	Hospet to Kottur	38·10		
	South Indian—			
	Saidapet to Madras	8·38	17·38	
	Tiruppachettu to Sivagunga (*d*)	9·00		
	Tinnevelly-Quilon (Travancore) (*British section*)—			
	Kallidaikurichi to the British frontier near Shencottah		31·33	
	Tanjore District Board—			
	Pattukkottai to Arantangi	28·35	33·88	
	Adirampatnam and Thambikkottai Sait sidings and Arantangi Quarry branch	5·53		
	Assam-Bengal—			
	Damchara to Lumding		100·74	
	Burma—			
	Letpadan to Tharawaw	23·00	26·00	
	Henzada to Henzada shore	3·00		
(v)	Eastern Bengal—			
	Golokganj to the Brahmaputra opposite Gauhati			151·62
	Bengal Dooars—			
	Dalgaon to Madarihat		9·80	
(vi)	Noakhali (Bengal)—			
	Laksam *viâ* Noakhali to Saheb-Ghatta (Ichakhali)		34·95	53·29
	Ahmedabad-Dholka—			
	Bavla to Dholka		8·54	
	Vijapur-Kalol-Kadi—			
	Kalol to Kadi		12·20	
(vii)	Tinnevelly-Quilon (Travancore) (*Native State section*)—			70·15
	Quilon to the British frontier near Shencottah		57·95	
(viii)	Jaipur—			
	Sanganer to Siwai-Madhopur (*c*)			72·85
	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Jubbulpore to Gondia	113·43	253·67	
	Neinpur to Mandla	21·75		
(ix)	Neinpur to Chindwara	87·49		297·50
	Famine lines (Madras Presidency)—			
	Mórappur to Dharmapuri	18·37	44·33	
	Tirupattur to Krishnagiri	26·46		
(x)	Khushalgarh-Kohat-Thal (2′ 6″)—			
	Kohat to Thal			62·03
	Barsi Light (2′ 6″)—			
	Barsi Town to Pandharpur	30·67	57·37	
	Barsi Town to Tadwala	26·70		
	Kalka-Simla (2′ 6″)		60·00	
	Bukhtiarpore-Behar Light (2′ 6″)—			
	Bukhtiarpore to Behar		18·75	
	Madura District Board (2′ 6″)—			
	Ammayanayakkanur to Kotagudi	55·00	93·06	
	Periyakulam to Krishna-Manaik's Tope	5·00		
	Theni to Karuvanath	33·00		
(xi)	Shahdara-Saharanpur Light—			394·62
	Shahdara to Saharanpur	95·00	125·00	
	Baraut to Meerut	30·00		
	Howrah-Amta (2′ 0″)—			
	Jagatballubpur to Antpur	8·50	21·00	
	Antpur to Champadanga (*a*)	9·00		
	Antpur to Rajbulhat (*a*)	3·50		
	Dwara-Therria (2′ 6″)—			
	Therria Ghat to Maolong (*a*)	...	19·50	
	Maolong to Noorpur or Dwara			
	Rewah (2′ 6″)—			
	Rewah to Satna (*a*)		31·81	
	Gaekwar's Dabhoi (2′ 6″)—			
	Padra to Mobha		9·20	
(xii)	Gwalior Light (2′ 0″)—			127·37
	Gwalior to Sabulgarh		57·86	
	Moharbhanj—			
	Baripada Road to Baripada		28·50	

(*a*) Commencement of work not authorized.
(*b*) Constructed but not worked.
(*c*) Completion deferred.
(*d*) Work not commenced.

Appendix A.

Important documents.

Appendix A—*continued.*

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Ondal to Sainthia	43·62	82·49	
	Khurja to Hapur	38·87		
	Bengal-Nagpur—			
	Jamadhoba to Balliary		5·50	
	Great Indian Peninsula—			161·95
	Wardah Coal branch—			
	Warora to Bellarpur (c)		37·90	
	Salem-Attur (c)		36·06	
(ii)	North Western—			
	Hyderabad (Sind) to Badin	61·00	158·85	
	Jech Doab line, southern section—			
	Karana to Shorkot Road	97·85		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad	57·50	77·00	258·35
	Meerut to Hapur	19·50		
	Eastern Bengal—			
	Murshidabad to Jeaganj	6·00	22·50	
	Jeagonj to Lalgola	16·50		
(iii)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			162·90
(iv)	Bengal and North-Western—			
	Tirhoot section—			
	Mansi to Baptiahi	60·01	229·22	
	Bettiah to Bagaha	49·35		
	Sihursa to Murliganj	18·61		
	Bairagnia to Bikna Thori	79·55		
	Company's section—			
	Kopaganj to Dohrighat	21·70		
	Nilgiri—			361·99
	Coonoor to Ootacamund		31·50	
	Burma—			
	Pegu to Martaban (b)		121·27	
(v)	Eastern Bengal—			
	Katnia to Bonarpara			44·25
(vi)	Rohilkund and Kumaon (*Company' section*)—			
	Bareilly to Soron		56·00	
	Moradabad to Ramnagar		47·00	149·00
	Lalkua to Kashipur		45·00	
(vii)	North-Western—			
	Jullundur to the British Frontier (a)		—	6·80
(viii)	Baraset-Basirhat (2′ 6″)—			
	Baraset to Basirhat		26·00	28·15
	Tarakeshwar-Magra (2′ 6″)—			
	Magra to Tribeni		2·15	
(ix)	Gaekwar's Dabhoi (2′ 6″)—			
	Mobha to Kanjat		6·50	75·50
	Gwalior Light (2′ 6″)—			
	Sabulgarh to Sheopur		69·00	
(x)	Jullundur-Kapurthalla-Sultanpur (*Native State section*)—			
	Sultanpur to the British frontier (a)			22·02
(xi)	Cutch (2′ 6″)—			
	Anjar to Tuna			11·86
(xii)	East Indian—			
	Jharia to Dhanbaid	3·79	6·21	
	Northern Section of the Malkera-Katrasgarh cross connection	0·67		
	Tasra siding	1·75		
	Bengal-Nagpur—			
	Bhojudih to Bhaga	6·66	33·72	
	Bhaga to Malkera	8·79		
	Southern section of the Malkera-Katrasgarh cross connection	0·71	18·46	
	Bhowra siding	2·50		
	Indian Midland—			
	Ait to Kunch		8·85	
(xiii)	North Western—			
	Jech Doab line, Northern section—			
	Malakwal to Sargoda		46·25	
	Oudh and Rohilkhand—			
	Chilbila to Sultanpur	23·00	76·47	123·70
	Phaphamana to Siwait	3·63		
	Sultanpur to Fyzabad	36·37		
	Balamau to Madhoganj	14·47		
	Eastern Bengal—			
	Extension of Chitpore terminus		0·98	
(xiv)	Madras—			
	Tellichery to Azhikal		16·47	60·47
	Bombay, Baroda and Central India—			
	Godhra to Baroda		44·00	
(xv)	Bengal and North-Western—			
	Company's Section—			
	Kopaganj to Dohrighat	21·70	57·84	
	Aunrihar to Jaunpur	36·14		
	Rohilkund and Kumaon (*Lucknow-Bareilly section*)—			
	Dudhwa to Chandan Chowki (the Mohan river)		5·87	
	Tinnevelly-Quilon (Travancore) (*British section*)—			
	Kallidaikurichi to Shencottah		30·88	249·21
	Tanjore District Board—			
	Pattukkottai to Arantangi		28·35	
	Assam-Bengal—			
	Damchara to Lumding		100·74	
	Burma—			
	Letpadam to Tharawaw	23·07	25·53	
	Henzada to Henzada shore	2·46		
(xvi)	Noakhali (Bengal)—			
	Laksam to Saheb Ghatta		34·90	
	Bengal Dooars extension—			53·21
	Dalgaon to Madarihat		9·81	
	Ahmedabad-Dholka—			
	Bavla to Dholka		8·50	
(xvii)	Vijapur-Kalol-Kadi—			
	Kalol to Kadi		12·20	40·20
	Tinnevelly-Quilon (Travancore) (*Native State section*)—			
	Quilon to Ponalur		28·00	
(xviii)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Gondia to Neinpur		74·50	121·63
	Neinpur to Seoni		47·13	
(xix)	Khushalgarh-Kohat-Thal (2′ 6″)—			
	Kohat to Thal			62·03
(xx)	Bukhtiarpore-Behar Light (2′ 6″)—			
	Bukhtiarpore to Behar		18·50	77·94
	Kalka-Simla (2′ 6″)—			
	Kalka to Simla		59·44	
(xxi)	Gaekwar's Dabhoi (2′ 6″)—			
	Padra to Kanjat			15·70

During 1903-1904, *i.e.*, from 1st April 1903 to 31st March 1904, 1,281·77 miles of new railway have been authorized as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State line worked by companies	161·95	
(ii) State lines worked by the State	258·35	
(iii) Assisted companies	162·90	
		583·20
3′ 3⅜″ gauge—		
(iv) State lines worked by companies	361·99	
(v) State lines worked by the State	44·25	
(vi) Assisted companies	148·00	
		554·24
Special (2′ 6″ and 2′ 0″) gauges—		
(vii) State lines worked by the State	6·80	
(viii) Assisted companies	28·15	
(ix) Lines owned by native states and worked by companies	75·50	
(x) Lines owned by native states and worked by state railway agency	22·02	
(xi) Lines owned and worked by native states	11·86	
		144·33
TOTAL		1,281·77

And 837·81 miles have been or are likely to be opened to public traffic as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(xii) State lines worked by companies	33·72	
(xiii) State lines worked by the State	123·70	
(xiv) Guaranteed companies	60·47	
		217·89
3′ 3⅜″ gauge—		
(xv) State lines worked by companies	249·21	
(xvi) Assisted companies	53·21	
(xvii) Lines owned by native states and worked by companies	40·20	
		342·62
Special (2′ 6″) gauge—		
(xviii) State lines worked by companies	121·63	
(xix) State lines worked by the State	62·03	
(xx) Assisted companies	77·94	
(xxi) Lines owned by native states and worked by companies	15·70	
		277·30
TOTAL		837·81

(*) Queston of gauge not yet settled.
(*b*) With a steam ferry to connect with the port of Moulmein—Commencement of work not yet authorized.
(*c*) Commencement of work not yet authorized.

Appendix A—*continued.*

The total length of open line at the commencement of 1904-1905, *i.e.*, on the 1st April 1904, will, therefore, 27,143·36 miles, comprising—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	6,787·62	
(ii) State lines worked by the State	4,537·92	
(iii) Guaranteed companies	1,409·24	
(iv) Assisted companies	876·05	
(v) Lines owned by native states and worked by companies	709·93	
(vi) Lines owned by native states and worked by state railway agency	201·63	
		14,522·39
3′ 3⅜″ gauge—		
(vii) State lines worked by companies	8,242·58	
(viii) State lines worked by the State	700·71	
(ix) Assisted companies	553·87	
(x) Lines owned by native states and worked by companies	752·78	
(xi) Lines owned and worked by native states	1,223·04	
(xii) Foreign lines	73·61	
		11,546·59
Special (2′ 6″ and 2′ 0″) gauges—		
(xiii) State lines worked by companies	177·87	
(xiv) State lines worked by the State	168·16	
(xv) Assisted companies	317·70	
(xvi) Lines owned by native states and worked by companies	282·69	
(xvii) Lines owned by native states and worked by state railway agency	33·60	
(xviii) Lines owned and worked by native states	94·36	
		1,074·38
TOTAL		27,143·36†

		Miles.	Miles.
(i)	East Indian	*1,938·47	
	Bengal Central (*a*)	125·01	
	Bengal-Nagpur	*1,684·22	
	Indian Midland	(*b*) 805·38	
	Great Indian Peninsula	1,561·63	6,787·62
	Bhopal Itársi (*British section*)	(*b*) 13·11	
	Godhra-Rutlam-Nagda	(*c*) 141·14	
	Bezwada extension	*(*d*) 21·47	
	Madras (North-East line)	(*e*) & (*f*) 497·19	
(ii)	North Western	*(*g*) & (*h*) 3,118·13	
	Oudh and Rohilkhand	* (*a*) 1,141·11	4,537·92
	Eastern Bengal	*278·68	
(iii)	Bombay, Baroda and Central India	(*e*) 504·68	
	Madras	*904·56	1,409·24
(iv)	Delhi-Umballa-Kalka	*(*i*) 162·21	
	Tarkessur	(*i*) 22·23	
	South Behar	(*i*) 78·76	
	Southern Punjab	*(*j*) 425·33	876·05
	Hardwar-Dehra	(*k*) 32·04	
	Tapti Valley	(*c*) 155·48	
(v)	Bina-Goona-Baran	(*b*) 145·63	
	Bhopal-Ujjain	(*b*) 113·27	
	Bhopal-Itarsi (*Native State section*)	(*b*) 44·28	
	The Nizam's Guaranteed State	330·13	709·93
	Nagda-Ujjain	(*c*) 134·32	
	Petlad-Cambay (Anand-Tarapur section)	(*c*) 21·50	
	Petlad-Cambay (Tarapur-Cambay section)	(*c*) 10·92	
	Kolar Gold-fields	(*e*) 9·88	
(vi)	Rajpura-Bhatinda	(*j*) 107·05	
	Jammu and Kashmir (*Native State section*)	(*j*) 15·92	201·63
	Ludhiana-Dhuri-Jakhal	(*j*) 78·66	
(vii)	Bengal and North-Western—		
	Tirhoot section	516·89	
	Company's section (*l*)	*870·80	
	Rohilkund and Kumaon (*Lucknow-Bareilly section*)	(*t*) 237·04	
	Rajputana-Malwa	(*c*, *h* & *m*) 1,648·36	
	Palanpur Deesa	(*c*) 17·28	
	Southern Mahratta	1,042·04	
	Guntakal-Mysore frontier	(*n*) 119·50	
	Mysore section (Southern Mahratta)	(*n*) 296·22	8,242·58
	Nilgiri	(*e*) 16·00	
	South Indian	1,123·13	
	Tinnevelly-Quilon (Travancore) (*British section*)	(*o*) 49·93	
	Tanjore District Board	(*o*) 99·46	
	Assam-Bengal	*744·08	
	Burma	1,336·97	
	Jodhpur-Hyderabad (*British section*)	(*p*) 123·93	
(viii)	Eastern Bengal—		
	Northern Behar and Kaunia-Dhubri sections (*including the Kaunia-Kuvigram branch and British section, Cooch Behar-Santrabari extension 2′ 6″ gauge*)	*635·19	
	Dacca section	85·92	700·71
	Cawnpore-Burhwal (*Metre gauge link*)	(*q*) 79·60	
(ix)	Deoghur	4·79	
	Brahmaputra-Sultanpur (*b*[1])	(*r*) 59·37	
	Mymensingh-Jamalpur-Jogannathganj	(*s*) 53·14	
	Rohilkund and Kumaon (*Company's section*)	53·92	
	Bengal Dooars	36·40	
	Bengal Dooars extensions	*116·56	553·87
	Dibru-Sadiya	77·50	
(x)	Ledo and Tikak-Margherita Colliery	(*c*) 11·99	
	Ahmedabad-Parantij	(*c*) 54·70	
	Sagauli-Raxaul (*b*[1])	(*t*) 18·09	
	Ahmedabad-Dholka	(*c*) 33·50	
	Noakhali (Bengal)	34·99	
	Gaekwar's Mehsána	(*c*) 92·63	
	Hyderabad-Godavari Valley	(*d*) 391·42	
	Kolhapur	(*u*) 29·27	
	Hindupur (Yesvantpur-Mysore frontier)	(*n*) 51·35	
	Mysore-Nanjangud	(*n*) 15·86	752·78
	Vijapur-Kalol-Kadi	(*c*) 41·64	
	Shoranur-Cochin	(*e*) 64·25	
	Birur-Shimoga	(*n*) 37·92	
	Tinnevelly-Quilon (Travancore) (*Native State section*)	(*o*) 28·06	
(xi)	Jodhpur-Bikaner	700·29	
	Udaipur-Chittor	67·30	
	Bhavnagar-Gondal-Junagad-Porbandar	(*u*) 334·19	1,223·04
	Jetalsar-Rajkot	(*v*) 46·21	
	Jamnagar	(*w*) & (*w*) 54·22	
	Dhrangadra	(*v*) 20·83	
(xii)	West of India Portuguese	(*x*) 51·11	
	Pondicherry	(*o*) 7·85	73·61
	Karaikkal-Peralam	(*o*) 14·65	
(xiii)	Bengal-Nagpur—		
	Jubbulpore-Gondia extension (2′ 6″)	121·63	177·87
	Raipur-Dhamtari branch (2′ 6″)	56·24	
(xiv)	Jorhat (2′ 0″)	30·00	
	Nowshera-Durgai (2′ 6″)	(*f*) 40·25	168·16
	Dandot Light (2′ 0″)	(*f*) 6·18	
	Khushalgarh-Kohat-Thal (2′ 6″)	(*f*) 91·73	
(xv)	Darjeeling-Himalayan (2′ 0″)	51·00	
	Barsi Light (2′ 6″)	21·59	
	Howrah-Amta (2′ 0″)	28·69	
	Howrah-Sheakhala (2′ 0″)	19·75	
	Ranaghat-Krishnagar (2′ 6″) (*b*[1])	20·25	
	Tarakeshwar-Magra (2′ 6″)	31·12	317·70
	Tezpore-Balipara (2′ 6″)	20·10	
	Powayan (2′ 6″)	(*x*) 39·50	
	Thaton-Duyinzaik Light (2′ 6″)	7·76	
	Bukhtiarpore Behar Light (2′ 6″)	18·50	
	Kalka-Simla (2′ 6″)	59·44	
(xvi)	Gaekwar's Dabhoi (2′ 6″)	(*c*) 94·50	
	Rajpipla (2′ 6″)	(*c*) 37·27	282·69
	Pasakimedi (2′ 6″)	(*y*) 24·68	
	Gwalior Light (2′ 0″)	(*z*) 126·24	
(xvii)	Cooch Behar (2′ 6″) (*b*[1])		(*z*) 33·60
(xviii)	Morvi (2′ 6″)		94·36

(*a*) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(*b*) Worked by the Great Indian Peninsula Railway Company.
(*c*) Worked by the Bombay, Baroda and Central India Railway Company.
(*d*) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(*e*) Worked by the Madras Railway Company.
(*f*) Including 2·66 miles laid on a mixed gauge and 0·31 miles on the 3′ 3⅜″ gauge.
(*g*) Including 5·63 miles of military line not used for public traffic.
(*h*) Including 26·28 miles of mixed (5′ 6″ and 3′ 3⅜″) gauge between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputtana-Malwa railways.
(*i*) Worked by the East Indian Railway Company.
(*j*) Worked by the North Western State railway.
(*k*) Worked by the Oudh and Rohilkand State railway.
(*l*) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
(*m*) Including 2·10 miles at Ujjain and 3·07 miles between Jumna East Bank and Agra Cantonment laid on the 5′ 6″ gauge.
(*n*) Worked by the Southern Mahratta Railway Company.
(*o*) Worked by the South Indian Railway Company.
(*p*) Worked by the Jodhpur-Bikaner railway.
(*q*) Excluding 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh but including the length, Bara Banki to Burhwal, 16·79 miles, and the length over Cawnpore bridge, 0·59 miles, laid on a mixed gauge.
(*r*) Worked by the Eastern Bengal State railway.
(*s*) Worked by the Assam Railways and Trading Company.
(*t*) Worked by the Bengal and North Western Railway Company.
(*u*) Including 4·93 miles* of Bhavnagar Dock estates and Junagad quarry lines.
(*v*) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
(*w*) Including 3·93 miles* of Bedi Bandar Dock estate siding.
(*x*) Worked by the Rohilkund and Kumaon Railway Company.
(*y*) Worked by the Bengal-Nagpur Railway Company.
(*z*) Including 39·23 miles between Viramgam and Wadhwan converted from the 5′ 6″ gauge to the 3′ 3⅜″ gauge on the 14th December 1903.
(*z*[1]) Including the metre gauge connection 3·81 miles between the Oudh and Rohilkhand Cantonment and the Bengal and North-Western railway city stations at Benares.
(*b*[1]) Negotiations are in progress for the purchase of this line by the State.

* Correction of mileage.

† Made up as follows :—

Open at the commencement of 1903-1904	26,907·72	
Add—Opened during 1903-1904	237·81	
	27,145·53	
Deduct—Net decrease due to corrections of milage	2·17	
	27,143·36	

Appendix A.

Important documents.

		Miles.	Miles.	Miles.
(i)	East Indian—			
	Mainpur to Hariharpur	99·79		
	Kusunda to Chandore	4·16		
	Shikohabad to Farukhabad	65·82	252·26	
	Ondal to Saindhia	43·62		
	Khurja to Hapur	38·87		
	Bengal-Nagpur—			
	Bhojudih to Parthadihi	1·45		
	Bhojudih to Hariharpur	27·90	40·76	
	Malkera to Mohuda	5·91		566·34
	Jamadhoba to Balliary	5·50		
	Madras (North-East line)—			
	Korukkupettai to Basin Road		0·93	
	Salem-Attur (a)		36·06	
	Agra-Delhi Chord		127·16	
	Ashikal-Managalore Extension		77·27	
	Great Indian Peninsula (Wardha Coal Branch)—			
	Warora to Pellarpur (a)		37·90	
	North Western—			
	Sargoda to Shorkot Road	103·00		
	From a point 12 miles South of Quetta to Nushki	82·50	246·50	
	Hyderabad (Sind) to Badin	61·00		
	Oudh and Rohilkhand—			
	Allahabad to Phaphamau	7·62		
	Phaphamau to Zafrabad	57·50	84·62	
(ii)	Meerut to Hapur	19·50		436·87
	Eastern Bengal—			
	Panchoorla to the Ganges (b)	6·00		
	Ranaghat to Murshidabad	75·00		
	Murshidabad to Jeaganj	6·00	105·75	
	Jeaganj to Lalgola	16·50		
	Kankurgachi Chord	2·25		
(iii)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			162·90
	Bengal and North-Western—			
	Tirhoot section—			
	Sakri to Jainagar	36·42		
	Mansi to Baptiahi	60·01		
	Bettiah to Bagaha	49·35		
	Sikrana to Murliganj	18·61		
	Bairagnia to Bikna Thori	79·55	365·06	
	Compagny's section—			
	Uska Bazar to Tulsipur	53·54		
	Gaisamri to Jarwa	12·56		
	Gorakhpur to Bagaha	60·94		
	Rajputana-Malwa—			
(iv)	Rewari to Phulera		133·32	716·75
	Famine lines (Madras Presidency)—			
	Bellary to Rayadrug	33·00	71·10	
	Hospet to Kottur	38·10		
	South Indian—			
	Tiruppachettu to Sivagunga		9·00	
	Tanjore District Board—			
	Adirampatnam and Thambikkottai Salt sidings and Arantangi Quarry branch		5·53	
	Nilgri—			
	Coonoor to Ootacamund		11·50	
	Burma—			
	Pegu to Martaban (a)		131·27	
	Eastern Bengal—			
(v)	Golokganj to the Brahmaputra opposite Gauhati	151·62	195·87	
	Kaunia to Bonarpara	44·25		
	Rohilkund and Kumaon (Company's sections)—			
(vi)	Bareilly to Soron	56·00		
	Moradabad to Ramnagar	47·00	148·00	
	Laiksa to Kashipur	45·00		
(vii)	Tinnevelly-Quilon (Travancore) (Native State section)—			
	Ponalur to the Frontier of the Travancore State near Shencottah		29·85	
(viii)	Jaipur—			
	Sanganer to Siwai-Madhopur (c)		72·85	
	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Jubbulpore to Neinpur	68·93		
	Neinpur to Mandla	21·75	131·04	
(ix)	Seoni to Chindwara	40·36		174·83
	Famine lines (Madras Presidency)—			
	Morappur to Dharmapuri (2′ 6″)	18·36	43·79	
	Tirupattur to Krishnagiri (2′ 6″)	25·43		
(x)	North Western—			
	Jullundur to the British Frontier (d)			6·80
	Barsi (2′ 0″)—			
	Barsi Town to Pandharpur	30·67	57·37	
	Barsi Town to Tadwala	26·70		
	Howrah-Amta (2′ 0″)—			
	Jagatbullubpur to Antpur	8·50		
	Antpur to Champadaga (a)	9·00	21·00	
	Antpur to Rajbulhat (a)	3·50		
	Dwara-Therria (2′ 6″)—			
	Therria Ghat to Maolong (a)	6·00		
	Maolong to Noorpore or Dwara	13·50	19·50	
(xi)	Madura District Board (2′ 6″)—			344·02
	Ammayanayakkanur to Kotagudi	55·00		
	Periyakulam to Krishna Manaik's Tope	5·00	93·00	
	Theni to Karuvanath	33·00		
	Shahdara to Saharanpur (2′ 6″)—			
	Shahdara to Saharanpur	95·00	125·00	
	Baraut to Meerut	30·00		
	Baraset-Basirhat (2′ 6″)—			
	Baraset to Basirhat		26·00	
	Tarakeshwar Magra (2′ 6″)—			
	Magra to Tribeni		2·15	
	Moharbanj (2′ 6″)—			
	Baripada to Baripada Road		28·50	
(xii)	Gwalior (2′ 0″)—			155·36
	Gwalior to Sabulgarh	57·36	126·86	
	Subulgarh to Sheopur	69·00		
(xiii)	Jullundur-Kapurthalla-Sultanpur (Native State section)—			
	Sultanpur to the British Frontier (d)		22·02	
(xiv)	Cutch (2′ 6″)—			
	Anjar to Tuna		11·86	

Appendix A—*continued.*

And the mileage under construction or sanctioned for construction on the 31st March 1904 will be 3,044·42 miles, made up as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	566·34	
(ii) State lines worked by the state	436·87	
(iii) Assisted companies	162·90	1,166·11
3′ 3⅜″ gauge—		
(iv) State lines worked by companies	716·75	
(v) State lines worked by the state	195·87	
(vi) Assisted companies	148·00	
(vii) Lines owned by native states and worked by companies	29·95	
(viii) Lines owned and worked by native states	72·85	1,163·42
Special (2′ 6″ and 2′ 0″) gauges—		
(ix) State lines worked by companies	174·83	
(x) State lines worked by the state	6·80	
(xi) Assisted companies	344·02	
(xii) Lines owned by native states and worked by companies	155·36	
(xiii) Lines owned by native states and worked by state railway agency.	22·02	
(xiv) Lines owned and worked by native states	11·86	714·89
TOTAL		3,044·42

Making a grand total of railways completed and in hand, at the commencement of 1904-1905 of miles . . . . *30,187·78

And showing, after allowing for lines abandoned and corrections of mileage, an advance on the previous year of miles . . . . . 1,230·36

(a) Commencement of work not yet authorized.
(b) Constructed but not worked.
(c) Completion deferred.
(d) Question of gauge not yet finally settled.

* Made up as follows:—

	Miles.	Miles.
Completed and in hand at the beginning of 1903-1904	28,957·42	
Sanctioned during 1903-1904	1,281·77	
	30,239·19	
Deduct—		
Abandoned—		
Rewah-Sutna	31·81	
South Indian, Marina loop—Saidapet to Madras	8·38	
	40·19	
Net decrease due to corrections of mileage	11·22	
	51·41	
	30,187·78	

Appendix A—*concluded.*

It is expected that the following lengths of unfinished line will be opened for public traffic in 1904-05:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by companies	162·85	
(ii) State lines worked by the State	151·12	
		313·97
3⅜″ gauge—		
(iii) State lines worked by the State	69·25	
(iv) Lines owned by native states and worked by companies	29·95	
		99·20
Special (2′ 6″) gauge—		
(v) State lines worked by companies	153·08	
(vi) Assisted companies	41·65	
		194·73
TOTAL		607·90

Leaving the undermentioned lines for completion in 1905-1906 or later:—

	Miles.	Miles.
5′ 6″ gauge—		
(vii) State lines worked by companies	403·49	
(viii) State lines worked by the State	285·75	
(ix) Assisted companies	162·90	
		852·14
3′ 3⅜″ gauge—		
(x) State lines worked by companies	716·75	
(xi) State lines worked by the State	126·62	
(xii) Assisted companies	148·00	
(xiii) Lines owned and worked by native states	72·85	
		1,064·22
Special (2′ 6″ and 2′ 0″) gauges—		
(xiv) State lines worked by companies	21·75	
(xv) State lines worked by the State	6·80	
(xvi) Assisted companies	302·37	
(xvii) Lines owned by native states and worked by companies	155·36	
(xviii) Lines owned and worked by native states	11·86	
(xix) Lines owned by native states and worked by State railway agency	22·02	
		520·16
TOTAL		2,436·52

		Miles.	Miles.	Miles.
(i)	Bengal-Nagpur—			
	Bhojudih to Parthadihi	1·45		
	Bhojudih to Hariharpur	27·90		
	Malkera to Mohuda	5·91	40·76	
	Jamadhoba to Balliary	5·50		
	Agra-Delhi Chord		121·16	162·85
	Madras (North-East line)—			
	Korukkupettai to Basin Road		0·93	
(ii)	North Western—			
	Hyderabad (Sind) to Badin	61·00	118·00	
	Jech Doab, Southern section—			
	Sargoda to mile 46 near Chund	57·00		
	Oudh and Rohilkhand—			
	Allahabad to Phaphamau	7·62	27·12	151·12
	Meerut to Hapur	19·50		
	Eastern Bengal—			
	Panchooria to the Ganges		(a)6·00	
(iii)	Eastern Bengal—			
	Golokganj to Sankosh		25·00	69·25
	Kaunia to Bonarpara		44·25	
(iv)	Tinnevelly-Quilon (Travancore) *(Native State section)*—			
	Ponalur to the Frontier of the Travancore State near Shencottah			29·95
(v)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Jubbulpore to Neinpur	68·93	109·29	
	Seoni to Chindwara	40·36		
	Famine lines (Madras Presidency)—			153·08
	Morappur to Dharmapuri (2′ 6″)	18·36	43·79	
	Tirupattur to Krishnagiri (2′ 6″)	25·43		
(vi)	Dwara Therria (2′ 6″)—			
	Dwara or Noorpur to Maolong		13·50	
	Baraset-Basirhat (2′ 6″)—			
	Baraset to Basirhat		26·00	41·65
	Tarakeshwar-Magra (2′ 6″)—			
	Magra to Tribeni		2·15	
(vii)	East Indian—			
	Shikohabad to Farukhabad	65·82		
	Kasunda to Chandore	4·16		
	Manpur to Hariharpur	99·79	252·26	
	Oadal to Sainthia	43·62		
	Khurja to Hapur	38·87		
	Great Indian Peninsula—			403·49
	Wardha Coal Branch—			
	Warora to Bellarpur (b)		37·90	
	Salem-Attur—			
	Salem to Attur (b)		36·06	
	Azhikal-Mangalore extension		27·27	
	North Western—			
	From mile 46 near Chund to Shorkot Road	46·00	128·50	
	From a point 12 miles south of Quetta to Nushki	82·50		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad		57·50	285·75
	Eastern Bengal—			
	Kankurgachi Chord	2·25		
	Ranaghat to Jeaganj	84·00	99·75	
	Jeaganj to Lalgola	16·50		
(ix)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			162·90
(x)	Bengal and North-Western—			
	Tirhoot section—			
	Sakri to Jainagar	30·47		
	Mansi to Baptiahi	60·01		
	Bettiah to Bagaha	49·35		
	Sibursa to Murliganj	18·61		
	Bairagnia to Bikna Thori	79·55	365·03	
	Company's section—			
	Uska Bazar to Tulsipur	53·54		
	Gaisapri to Jarwa	12·56		
	Gorakhpur to Bagaha	60·94		
	Rajputana-Malwa—			
	Rewari to Phulera		133·32	
	Famine lines (Madras Presidency)—			
	Bellary to Ravadrug	33·00	71·10	
	Hospet to Kottur	38·10		
	South Indian—			716·75
	Tiruppachettu to Sivaganga		9·60	
	Tanjore District Board—			
	Adirampatnam and Thambikkottai Salt sidings and Arantangi Quarry branch		5·53	
	Burma—			
	Pegu to Martaban (b)		121·22	
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
(xi)	Eastern Bengal—			
	Sankosh to the Brahmaputra opposite Gauhati			126·6
(xii)	Rohilkund and Kumaon (Company's section)—			
	Bareilly to Soron		56·00	148·00
	Moradabad to Ramnagar		47·00	
	Lalkua to Kashipur		45·00	
(xiii)	Jaipur—			
	Sanganer to Siwai-Madhopur (d)			72·85
(xiv)	Bengal-Nagpur (Jubbulpore-Gondia extension) (2′ 6″)—			
	Neinpur to Mandla			21·75
(xv)	North Western—			
	Jullundur to the British Frontier (c)			6·80
(xvi)	Barsi (2′ 6″)—			
	Barsi Town to Tadwala	26·70	57·37	
	Barsi Town to Pandharpur	30·67		
	Dwara-Therria (2′ 6″)—			
	Maolong to Therria Ghat		6·00	
	Howrah-Amta (2′ 0″)—			
	Jagatbullubpur to Antpur	8·50	21·00	
	Antpur to Champadanga (b)	9·00		
	Antpur to Rajbalhat (b)	3·50		
	Madura District Board (2′ 6″)—			302·37
	Ammayanayakkanur to Kotagudi	55·00	93·00	
	Periyakulam to Krishna Manaik's Tope	5·00		
	Theni to Karuvanath	33·00		
	Shahdara-Saharanpur (2′ 6″)—			
	Shahdara to Saharanpur	95·00	125·00	
	Baraut to Meerut	30·00		
(xvii)	Moharbhang (2′ 6″)—			
	Baripada to Baripada Road		28·50	155·36
	Gwalior (2′ 0″)—			
	Gwalior to Sheopur		126·86	
(xviii)	Cutch (2′ 6″)—			
	Anjar to Tuna			11·86
(xix)	Jullundur-Kapurthalla-Sultanpur *(Native State section)*—			
	Sultanpur to the British Frontier (c)			22·02

(a) Construction completed.
(b) Commencement of work not yet authorised.
(c) Question of gauge not yet finally settled.
(d) Completion deferred.

Appendix B.
Important documents.

APPENDIX B.

No. 1161 R. C.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

FROM

MR. A. BEERETON, SECRETARY, RAILWAYS,

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS AND BOMBAY, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE SECRETARY TO THE GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT.

THE SECRETARY TO THE GOVERNMENT OF BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE HONOURABLE THE CHIEF COMMISSIONER OF ASSAM.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE RESIDENT IN MYSORE.

THE HONOURABLE THE AGENTS TO THE GOVERNOR GENERAL FOR CENTRAL INDIA AND RAJPUTANA.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA, LUCKNOW AND ASSAM.

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, AND EASTERN BENGAL STATE RAILWAYS.

Simla, the 28th July 1903.

SIR,

I am directed to inform you that the Government of India have had under consideration the advisability of arranging that all girders of large bridges on metre gauge railways should be designed to carry 5′ 6″ gauge loads.

2. It is found that the general dimensions of large girders for the two gauges and of the masonry which carries them are nearly identical, and that the additional cost of providing the heavier girder would rarely be excessive, and in all cases would bear but a small proportion to the cost of the whole bridge. The principle underlying the proposal has already been recognised in the case of the standard dimensions prescribed for tunnels and for the spacing of tracks and fixed structures in station yards; and the advantages of ensuring that a conceivably desirable development may not be checked by the fact that existing girders will not admit of it except at a prohibitive cost, are obvious.

3. I am to state, therefore, that after careful consideration the Government of India are of opinion that the proposal should be adopted, and accordingly direct that in future all girders of 100′ span and over on metre gauge lines should be designed to carry standard gauge loads and to be suitable for easy conversion to that gauge unless special sanction to the contrary is obtained from the Government of India.

I have the honour to be,

SIR,

Your most obedient servant,

F. D. COUCHMAN,

Under-Secretary.

Documents accompanying.

Nil.

APPENDIX C.

Construction of feeder lines by Local District Boards from taxes expressly levied for the purpose, and the financing of such lines.

No. 21 R. P.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY PROJECTS.

To

THE SECRETARIES TO THE GOVERNMENTS OF BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE NORTH-WESTERN PROVINCES AND OUDH AND THE PUNJAB, PUBLIC WORKS DEPARTMENT.

THE HONOURABLE THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES AND ASSAM.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE RESIDENT IN MYSORE.

THE HONOURABLE THE AGENT TO THE GOVERNOR GENERAL AND CHIEF COMMISSIONER OF THE NORTH-WEST FRONTIER PROVINCE.

THE HONOURABLE THE AGENTS TO THE GOVERNOR GENERAL FOR RAJPUTANA, CENTRAL INDIA AND BALUCHISTAN.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA, LUCKNOW AND ASSAM.

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, AND EASTERN BENGAL (STATE) RAILWAYS.

Calcutta, the 5th February 1902.

SIR,

I am directed to forward, for information, a copy of a note on the subject of the provision of branch or feeder lines in India by "Private enterprise" outside the Government of India programme of railway construction, and to state that the Government of India will be glad to consider any suggestions on the subject, and to receive proposals which will permit of the construction of such lines of railway on the basis of the general conditions outlined in the note.

I have the honour to be,

SIR,

Your most obedient Servant,

NEVILLE PRIESTLEY,

Offg. Under Secretary.

Document accompanying.

Note referred to.

Enclosure to Government of India letter No. 21 R. P., dated 5th February 1902.

NOTE ON THE FINANCING OF BRANCH LINES OF RAILWAY.

There have recently been many proposals before the Government of India for the construction of branch lines of railway by what is known as "Private enterprise." In most of the schemes submitted one of the conditions usually demanded by the Promoters is that a certain minimum rate of interest shall be guaranteed to the shareholders. A guarantee of interest, whether directly by Government or indirectly by one of the working railway agencies, brings the scheme within what is known as the "Railway Programme," and thus it has to take its chance in the struggle for a share of the programme allotment with all other schemes requiring a Government guarantee.

APPENDIX C—*contd.*

Important documents.

2. As can be readily conceived, the demands on the "Railway Programme" are always greatly in excess of the amount, however large, which is therein allotted for railway expenditure. From the sum available, funds for the necessary improvement of existing railways must in the first place be provided, and with the steady development which is taking place in them, the amount thus required is considerable. Next, money has to be provided for continuing work on railways already under construction. The residue is available for new lines.

3. In the year 1901-1902, the total amount allotted to the "Railway Programme" was Rs. 10,32,44,000, which was distributed as follows :—

	Rs.
For expenditure on existing railways	4,59,97,000
" " " lines under construction	4,59,47,000
" " " new lines	1,13,00,000
TOTAL ...	10,32,44,000

It will be seen that with the large number of railways of Imperial importance still remaining to be constructed, there is little room for the provision of funds for small branch lines out of a total allotment of only 113 lakhs of rupees for new lines. So long, therefore, as Promoters demand a guarantee (and there seems to be a strong disinclination on the part of the investing public to place their money in unguaranteed Indian railway schemes), and while the demands for lines of Imperial importance continue, there are small prospects of lines of only local importance finding a place in the "Railway Programme."

4. The importance of these branches, both to the country and to the railways with which they will connect, is nevertheless fully recognised, and much consideration has been given to the problem of how they may be provided outside the programme.

5. The point to which most consideration appears to have been given in all schemes for branch lines has been whether the branch would justify its construction by what it would earn *for itself*, and attention appears to have been only incidentally directed to the benefits which the main line would derive from its construction. Recognising how great the importance was of these branch lines to the main line, the Government of India in their Resolution No. 514 R. C., dated 17th April 1896, authorised the main line paying a rebate to the branch line of the full amount of the net earnings derived by the former from traffic interchanged with the latter, so as to help the branch to make up with its own earnings a dividend of $3\frac{1}{2}$ per cent. on its capital. But the effects of this concession would to some extent be neutralised if the charges made by main lines for working the branches were pitched too high. It is only necessary to examine the accounts of any branch line which has been constructed to see that not only has the main line not suffered either at its junction or on the main line, but that the traffic brought to it by the construction of the branch would have justified its undertaking to work the branch for nothing rather than not have had it constructed. The addition of a short branch to the main line adds bare out-of-pocket expenses only to the working charges of the latter, and it would materially assist the construction of these branches, if the main lines not only allowed rebates on interchanged traffic, but gave liberal concessions, in the matter of working expenses.

6. But however liberal the terms offered may be, there still remains the difficulty of financing these branches without a guarantee. It is not necessary here to consider why there should be so much hesitation in investing money in railway projects. The fact remains that unguaranteed schemes are in little favour and that it is almost impossible to raise the money for an Indian line of railway without a Government guarantee. It has already been shewn that this guarantee cannot always be given by the Imperial Government, because their hands are full of projects of Imperial importance, but there is no reason why a sufficiently good guarantee should not be given by the Local authorities through whose areas the line will run.

APPENDIX C—*contd.*

7. In their Resolution* No. 3210 A., dated the 22nd July 1898, the Government of India in the Finance and Commerce Department explained to what extent the powers of taxation conferred upon Local Boards could be used for the furtherance of railway schemes. Where a margin exists between the amount actually raised for necessary expenditure and the amount which Local Boards have power to levy, the Local Boards can have no financial difficulty in guaranteeing railway lines to the extent of the margin. But where a Local Board is already spending to the full extent of its taxing powers and the margin is insufficient to guarantee interest on the capital of the railway required, the case is different.

* Printed as Annexure No. 1.

8. To overcome the difficulty in the latter case, the Madras Government, with the concurrence of the Government of India, have recently by legislation authorised Local Boards to levy over and above the ordinary cess a special cess of three pies in the rupee on the assessment or the annual rent value of all occupied lands, on the understanding that the money thus raised will be utilised solely for the construction of tramways or railways. It would probably be to the advantage of other Local Governments to obtain sanction to enable similar taxation to be imposed, when necessary and advisable, in other parts of India where development is hindered through want of proper communications and of transport facilities.

Madras Local Boards Act VI of 1900.

9. There are few districts in India which would not be the better for more railway communications than they now possess, and in many of them schemes for a connection between important towns and the main line of railway have been languishing for years. In regard to all such projects the first question for the Local authority to determine is whether the margin of taxation remaining, or whether such margin, together with the special cess referred to in paragraph 8, will be sufficient to cover the full guarantee on the capital necessary to construct the railway. If it is sufficient, the next questions for consideration are : (*a*) what kind of railway shall be made ; (*b*) by what agency shall the capital be raised ; (*c*) by what agency shall the railway be made ; and (*d*) by what agency and on what terms shall the railway be worked when made.

10. Question (*b*), namely, by what agency shall the capital be raised, that is, whether it shall be raised by a loan, or whether the interest only on the capital shall be guaranteed to a company promoted by some firm of recognised standing or by the railway company working the main line, is a matter which must be influenced by the financial credit of the Local Board at the time. If either of the latter agencies is employed, it will generally be possible, in return for the guarantee, to specify that surplus profits over an agreed percentage shall be divided between the Company and the Local authority not only until arrears of guarantee have been made good, but during the whole currency of the contract, and in this manner the Local authority will be able to obtain an asset which will be available for the guaranteeing of other railways. In regard to the former method, it may be mentioned that in Madras an attempt recently made by District Board to raise a loan for a railway project did not meet with success, while in Bengal there has been no difficulty in finding firms of repute to raise the necessary capital on the guarantee of the District Board. Whichever method it may ultimately be decided to recommend the adoption of in the case of any particular scheme, it will need to be carefully scrutinised, as the failure of such projects after sanction has been given to them is very undesirable, not only because of the financial responsibility resulting to Government, but also because each failure is a serious impediment to new investors whom it is the policy of Government to encourage.

11. In regard to (*c*), namely, by what agency shall the railway be made, it will generally be found most satisfactory to employ the agency to make the line which will subsequently have to work it.

12. In regard to (*d*), namely, by what agency and on what terms shall the railway be worked when made, there can be little question, especially in the case of short branches, that the most satisfactory and economical results will

generally be obtained by having the branch worked by the main line agency. This is specially the case when the main line is allowing a rebate on interchanged traffic. The cost of working should as a rule be represented only by the main line's actual out-of-pocket expenses, and should be subject to a fixed maximum percentage of the gross earnings.

13. In regard to (*a*), namely, what kind of railway shall be made, the decision will depend largely on what kind of railway the traffic of the district to be served needs and the finances of the district can afford. If the branch line is to connect with a large town which is already connected with the railway by a good road, and there already exist reasonably satisfactory transport facilities, a better class of railway may be necessary to compete successfully with existing transport.

14. The proposals submitted in connection with branch lines occasionally provide for a railway of a standard which is quite out of keeping with the necessities of the district, and it is the construction of such railways equipped with all the most modern conveniences which makes the liability on account of interest excessive, and which causes the rejection of many schemes that could well have been adopted if they had only been projected on less ambitious lines.

15. If a less ambitious policy were generally adopted, it would, it is hoped, lead to the provision of many branch lines which otherwise will have to be indefinitely postponed. The provision of these railways must have the effect, possibly, of improving the revenues of the Local authorities, and certainly of saving expenditure on the upkeep of roads; and, if only the routes be carefully selected, the lines should not only prove no burden to the Local authorities but should soon be a source of income to them.

16. In the preceding paragraphs nothing has been said as to how Local authorities should proceed to get their projects taken up. If their desire to find promoters be made known, firms of standing may be expected to come forward with offers to raise a company. But it might generally be to the advantage of the Local Board to negotiate with the agency working the main line, who would have less difficulty in forming a company and in raising the necessary capital than firms not already engaged in railway promotion. In the case of branch lines connecting with State worked railways, there are generally some promoters who have already undertaken railway schemes and would no doubt be willing to undertake others. Lines thus projected would come outside the "Railway Programme," and the only limit on their construction would be the financial condition of the market and the amount of money in the hands of the public that is available for investment.

Annexure No. 1.

RESOLUTION, No. 3210 A., dated 22nd July 1898.—By the Government of India, Finance and Commerce Department.

Read again—

Resolution in this Department, No. 4445 A., dated the 7th October 1897:—

"The Government of India have noticed that in some cases District Boards, acting under the provisions of Acts by which they have been constituted, have guaranteed the payment, out of their revenues, of interest on capital raised for the construction of railways or other public works within the districts. Under the existing relations between Imperial and Provincial finances on the one hand and between Provincial and Local finances on the other, the ordinary effect of such a guarantee is that the whole liability for its fulfilment has ultimately to be borne by Imperial Revenues. An exception to this arises in cases where there is a margin between the actual rate of cess levied by the Board concerned and the maximum rate leviable under the law. This margin can then be utilised for the levy of a special cess, the proceeds of which would either by means of a separate guarantee fund or otherwise be available for meeting any demand on account of the guaranteed interest. But where a District Board already levies cess up to the maximum legal amount, the liability

on account of t[illegible]oard's guarantee must, in effect, be passed on to Provincial funds, either di[illegible]y. or by the transfer to Provincial of charges hitherto met from Local Fur[illegible]and in the same way the responsibility for a guarantee from Provincial Reve[illegible] must ultimately be passed on to Imperial Revenues, since under present co[illegible]ous Provincial Revenues cannot meet the guarantee, except for a short time, [illegible]rwise than by obtaining an assignment from the general revenues on acco[illegible]of it.

"2. In the [illegible]umstances above explained, it appears to the Governor General in Counc[illegible]hat such guarantees should not be given in cases which do not come withi[illegible]e exception above referred to, except by the special consent of the Governmen[illegible]India, and at a rate of interest to be approved by them. The considerations[illegible]verning the granting or withholding of consent and the rate of interest to [illegible]aid would in each case be those by which the desirability of a direct guarant[illegible]rom general revenues and the rate of interest to be guaranteed would ordinar[illegible]e determined.

"3. The Gove[illegible]ent of India would be glad to be favoured with the observations of the [illegible]al Governments on these proposals."

Read also—

Letter from the [illegible]overnment of the North-Western Provinces and Oudh, No. $\frac{1076}{IX.-92}$, dated the [illegible]d October 1897.

Letter from th[illegible]overnment of Burma, No. 647-8-P.—5, dated the 29th October 1897.

Letter from the [illegible]ief Commissioner, Central Provinces, No. 8513, dated the 6th November 18[illegible]

Letter from th[illegible]overnment of the Punjab, No. 2356, dated the 13th November 1897.

Letter from the [illegible]ef Commissioner, Assam, No. $\frac{271 L. S. G.}{8519 G.}$, dated the 13th November 1897.

Letter from the G[illegible]ernment of Madras, No. 2407-L.-Miscellaneous, dated the 9th December 189[illegible]

Letter from the G[illegible]ernment of Bengal, No. 2285 L. S. G., dated the 7th April 1898.

Letter from the G[illegible]ernment of Bombay, No. 2045, dated the 9th May 1898.

RESOLUTION.—The[illegible]rders proposed in the Resolution of 7th October last, reproduced above, are g[illegible]erally accepted by the Local Governments, and are therefore confirmed by t[illegible] Governor General in Council.

ORDER.—Ordered t[illegible]t a copy of the Resolution be forwarded to the Governments of Madras, [illegible]ombay, Bengal, North-Western Provinces and Oudh, the Punjab and Burma, [illegible]d the Chief Commissioners, Central Provinces and Assam, and to the Public [illegible]orks and Home Departments, for information.

Annexure No. 2.

No. [illegible]R. P., dated 28th January 1903.

From—The Governme[illegible] of India, Public Works Department,
To—The Secretary to t[illegible] Government of Madras, Public Works Department, Railway Branch.

I am directed to ack[illegible]ledge the receipt of your letter No. 1862 Railway, dated 13th November 19[illegible]ith which you forwarded a statement showing the action taken by Distr[illegible]oards in the Madras Presidency for the levy of a special cess under sectio[illegible] clause (ii) of the Madras Local Boards Act, 1884, to be utilized solely in [illegible]e construction of railways. I am to say that the Government of India conside[illegible]he enterprise shown by the District Boards in this matter to be very commendable and to be deserving of encouragement from the Government.

2. Since many years must elapse before the proceeds of the cess will, in the majority of the cases, amount to a sufficient sum to enable the Board to commence the work of railway construction, the Government of India think

Important documents.

that capital may suitably be borrowed for this purpose on [redacted] security of the special cess. The experience of the Tanjore District B[redacted] shows that at present very little reliance can be placed on the inves[redacted] public for the supply of the necessary capital, but I am to suggest, for th[redacted]sideration of His Excellency the Governor in Council, that a moderate amo[redacted] of money might be advanced for this purpose from the Provincial Loan A[redacted]nt. In that case the security for repayment would consist not only of the p[redacted]eds of the special cess, but of the entire resources of the District Board. [redacted]s security would be sufficient in most cases to justify a loan from Gover[redacted]nt, and the chief difficulty would arise in the finding of funds.

3. The Government of India are prepared to show [redacted]ir appreciation of the public spirit of the local tax-payers by supplying fun[redacted]s far as possible for loans for railway construction, and to this end they will [redacted] these suggestions prove acceptable to the Government of Madras, consid[redacted]any proposals that may be submitted by that Government for an increase [redacted] the sum annually allotted for the Provincial Loan Account. It will be n[redacted]ssary in each case of such application that the scheme for the proposed rai[redacted]y shall have been regularly sanctioned by competent authority, and no la[redacted]or definite sum can be promised for this purpose as the amount that may b[redacted]vailable in any year will depend on the particular circumstances of the [redacted]r; but the Board might find it possible to supplement the capital that ca[redacted]e furnished by the Government of loans floated in the open market, and t[redacted] to expedite the work of construction and secure to the inhabitants of the dis[redacted]t the earlier benefit of the special cess.

4. Any loans that may be made by the Governm[redacted]t of Madras in pursuance of these suggestions would be granted under [redacted]e Local Authorities Loans Act, 1879 (XI of 1879), and would be subject [redacted]he rules made under section 5 of that Act. They would not in ordinary c[redacted] have a currency o more than 30 years and should, preferably, be repaya[redacted] in a series of half yearly "equalised" instalments dating from the end o[redacted]he half-year in which the railway for which the loan is required shall have [redacted]en opened for traffic. The Government of India would expect the Governm[redacted] of Madras to satisfy itself, before granting any such loan, that the Distri[redacted] Board concerned will in all reasonable probability be in a position to repay [redacted] in regular instalments. The interest to be charged in all cases would be 4 per[redacted]t.

5. I am to inquire whether these suggestions co[redacted] themselves to His Excellency the Governor in Council, and, if so, to say [redacted]hat the Government of India will be prepared to receive definite proposals fo[redacted] expanding the Madras Provincial Loan Account.

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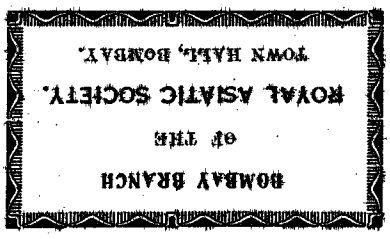

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